



15443



No

Presented by

I. Minis Hays, M.D.







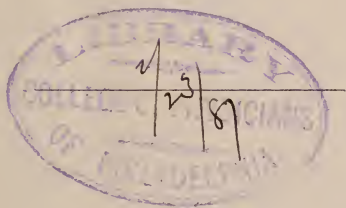


Digitized by the Internet Archive  
in 2014





THE  
CINCINNATI  
MEDICAL NEWS.



EDITED BY

J. A. THACKER, A.M., M.D., F. R. M. S., LOND.

*Fellow of American Academy of Medicine, etc.*

---

VOL. XIX., Old Series.

1886.

Vol. XV., New Series.

---

CINCINNATI:

PUBLISHED BY J. A. THACKER.

---

Printed by the Elm Street Printing Company, Nos. 176 & 178 Elm Street.

# INDEX, VOL. XIX.

	PAGE		PAGE
Anesthesia in Natural Labor.....	3	Ayer's Comp. Sarsaparilla, Form-	
Antiseptics, Use of in Labor.....	7	ula of.....	632
Albuminuria Treated by Fuchsine.	30	American Academy of Medicine..	648
Albuminuria and Mercury.....	49	Albuminuria, Pathology of Puer-	
Antiseptic—Corrosive Sublimate		peral.....	665
and Carbolic Acid.....	64	Autophonia, Causes of.....	669
Atropia and Morphia.....	93	American Academy of Medicine,	
Arthropathy, Spinal.....	97	Proceedings of.....	716
Aneurism, Abdominal, Diagnosis		Amenorrhea, Potass. Permang. in	771
and Prognosis of.....	99	Antiseptic Paper Dressing.....	777
American Medical Association....	142	American Humane Association...	787
.....	209, 346	Anesthetics in Obstetrics, Dr.	
Animals, Slaughtering for Food..	177	Parvin on.....	841
Amenorrhœa, Treated by Potash		Blood Corpuscles, Measurement	
Permanganate.....	181	of.....	43
Ascarides, Effect of Poisons on..	186	Blood, Hypodermically Used.....	48
Asthma, Prescription for.....	201	Braggadocio of a Young Physi-	
Antipyrin as a Styptic.....	203	cian.....	48
Anisic Acid as an Antipyretic....	203	Brain and Spinal Cord, Diseases of.	59
Alopecia Areata.....	245	Brown, Decease of Dr. T. M.....	70
Abscess, Pelvic, Laparotomy for..	260	Bruits, Cardiac and Gastric.....	85
Amenorrhœa Treated by Santo-		Bladder, Sewing up a Rent in....	127
nin.....	270	Brain, Loss of and Recovery.....	159
Asigmatism, with Relation to		Bacillus and Consumption.....	211
Optical Instruments.....	289	Brain, Tuke's Method of Examin-	
Apoplexy, Cause and Prognosis..	318	ing.....	269
Anesthetic, The New.....	325	Braithwaite, Dr., Courtesy to a	
Antiseptics, Internal Administra-		Young Physician.....	273
tion.....	327	Bowels, How to Open.....	313
Amputation of Uterus.....	332	Building Stone, Quality of.....	330
American Medical Association at		Bacillus Tuberculosis, Experi-	
St. Louis.....	346	ments with.....	405
Anesthetic and Antiseptics.....	354	Belladonna and Iodide of Potash.	418
Aneurism of the Aorta.....	370	Beef Tea, No Nutrition in.....	426
Antipyrin and Aconite in Diph-		Bronchitis, Acute Infantile, Treat-	
theria.....	383	ment.....	460
Amputation of the Thigh.....	397	Bacteria, Classification of.....	488
Abscess, Mammary, Prevention...	413	Bacillus Lepræ.....	554
Autopsies, Showing Intestinal		Booth, Dr., Advice to Young	
Obstruction.....	433	Physicians.....	566
Advertising, Question of Medical	448	Barleycorn, John, Poetry about..	573
Amenorrhœa, Permangan. Potass. in	469	Bartholow, Prof. Roberts.....	574
Ataxia, Locomotor, Treatment....	480	Bladder, Case of Rupture.....	603
Association of American Physi-		Bright's Disease, Chloride of So-	
cians.....	503	dium in.....	609
Aletis Cordial.....	504	Blood-letting in Pneumonia.....	617
Atropine, Morphine an Antidote		Brücke's Method with Urine.....	638
for.....	559	Boric Acid, Value of.....	681
Aortitis, Septic.....	561	Bacillide and Intra-Pulmonic	
Alcohol, The Use of.....	573	Medicator.....	721
Alcohol and Disease.....	623	Blenorrhagia, Treatment of.....	778
Addison's Disease, Koch's Bacilli		Beard, Habit of Wearing Long...	790
in.....	630	Blood, Fate of Extravasated.....	826
Acetone in Urine, How to Detect	630	Cirrosis, Case of General.....	11



PAGE	PAGE
Corpora Striata, Case of Softening of.....	39
Chapped Hands.....	41
Consumption, Iodoform in .....	47
Cholera, Iodine in.....	48
Cocaine in Whooping Cough.....	49
Chemistry, Dr. Frankland's Work on Inorganic.....	56
Climatology of the United States.....	57
Carbolic Acid and Corrosive Sublimate .....	64
Cancer, Causes of.....	67
Cholera, The Foci in Spain.....	68
Chronic Malarial Disorders, Certain Forms.....	73
Cardiac Bruits, Extra.....	85
Cancer, New Theories.....	112
Chancre and Chancroid. ....	118
Carbolic Acid in Indigestion.....	123
Congress, Medical, Ninth International .....	137
Congress, International, Rules of.	138
Cerebral Localization .....	141
Croup, Treatment of.....	180
Culture of Diseased Germs.....	195
Croup, Eucalyptus in.....	199
Chancre, The.....	202
Coryza, Inhalation for .....	203
Cholera Infantum, Treatment.....	251
Corpuscles, Degeneration and Regeneration .....	278
Clinical Notes.....	285
Cardiac Complications in Rheumatism .....	360
Corrosive Sublimate in Treatment of Diphtheria.....	385
Chatham Medical Society.....	395
Cranium, Extraction of, Report of a Case.....	396
Carbolic Acid a Specific for Erysipelas.....	399
Carcinoma Ventriculi, Treatment.	401
Craniotomy, Justifiability of.....	402
Chorea, Hyoscyamine in.....	409
Carrick's Soluble Food .....	412
Chlorate Potass., Actions and Uses	417
Collodion, Caution in Using Iodine of.....	417
Circumcision .....	418
Cocaine Abandoned in Cataract..	425
Clinical Society of Maryland.....	437
Cancer in Stomach.....	437
Chyluria.....	473
Cincinnati Industrial Exposition..	503
Cocaine, Benzoate of.....	562
Celerina, Dr. Montgomery on....	575
Cystitis, Case of Chronic.....	623
Chancroids.....	624
Constipation, Persistent.....	624
Cartilages, Removal of Loose.....	625
Cocaine, Safety of, in Cataract Extractions .....	627
Caffeine as a Diuretic.....	628
Cellar Building.....	640
Charrin, Dr. M., Discovery of....	648
Chicago Medical Society.....	658
Conjunctivitis, Treatment of Granular.....	681
Cholera, Therapeutics of.....	700
Chancre of Middle Ear.....	701
Cervix, Fatal Results from Splitting.....	702
Colic, Infantile, Formula for.....	704
Cardiac Dropsy, A Prescrip. for..	704
Corrosive Sublimate, Poisoning by.	712
Calomel in Membranous Croup...	753
Cocaine .....	776
Cocaine a Cure for Alcoholism....	779
Cocaine Craze.....	789
Cardiac Diseases, Prognosis in....	793
Corpuscles, Fate of Absorbed....	827
Cerebral Localization.....	832
Cocaine, Collapse Resulting from Injecting.....	838
Dickson, Decease of Dr. John....	72
Discussion of Treatment of Malarial Diseases.....	80
Diagnosis, Methods of.....	187
Diphtheria .....	192
Disease, Causes of.....	215
Diagnosis, Methods of.....	253
Discovery, New and Remarkable.	280
Diuresis Produced by Iodides.....	300
Diphtheria, Treatment by Balsam Peru .....	323
Disinfection by Carbolic Acid....	326
Displays at the Association.....	358
Diphtheritic Croup, Intubation of Larynx.....	359
Diphtheria, Treatment of.....	380
Dover's Powder and Its Modifications .....	414
Denque, Microscopic Disclosures in.....	431
Dysmenorrhea .....	483
Dysentery, Epidemic Treatment, etc.....	522
Diseases, Prevention of Communicable.....	543
Diphtheria Complicated by Whooping Cough.....	606
Doctor of the Future.....	629
Dysentery, Formulas for.....	703
Diarrhea, Formula for.....	704
Diphtheria, Most Efficient Treatment.....	752
Diabetes, Report of a Case.....	757
Diphtheria, Formula for.....	779
Degrees, Conferring of LL. D....	791
Discovery, An Important.....	792

	PAGE		PAGE
Dysmenorrhea, Membranous, Galvano-Cautery Used.....	839	Ferran on Inoculation of Cholera.....	625
Epithelioma, Resorcine in.....	47	Fevers, Preventive Treatment of.....	654
Experiments with Morphia and Atropia.....	95	Flint's Practice of Medicine.....	705
Eyes, Congenital Malformation....	110	France, Population of.....	757
Ergot, The Question About.....	115	Fistula in Ano.....	759
Eczema, Treatment of.....	131	Fissure of Anus.....	773
Earths, Topical Uses of.....	145	Finger, Conservative Surgery of.....	779
Electricity in Obstetrics.....	173	Feet, Prescription for Sweating... ..	843
Eucalyptus and Turpentine in Croup.....	199	Facial Paralysis, Dr. Eichhorst on.....	854
Eucalyptus as a Topical Agent. . .	229	Field, Dr. C. C., Death of.....	130
Epithelioma of Cervix.....	272	Glycerine, Anhydrous.....	162,
Etherization by Rectum.....	293	Gynecological Society of Chicago.....	260
Evolution in Pathology.....	316	Germes, Diseased.....	194
Eserine in Iritis.....	375	Gynecology, Overgrowth of Surgery in.....	271
Embolism, Cerebral.....	392	Glass, Discovery of New, for Ob- jectives.....	280
Erysipelas, Treatment of.....	399	Germes in Fever.....	329
Eels in Paste.....	410	Graduates, Too Many Medical... ..	430
Ear, Removal of Foreign Bodies from.....	416	Gastrotomy.....	442
Eyelids, Granulated.....	432	Gonorrheal Tubo-Ovarian Abscess.....	533
Embolism.....	444	Gout Treated by Dr. Ferran.....	625
Eyes, Dangers to Badly Formed..	515	Green, Dr. E. M., on Brücke's Method.....	638
Eyes, Action of Bad Light on.....	516	Gratuity, Magnificent.....	648
Empyema, Treatment of.....	545	Hemorrhage, Cold Injections in Uterine.....	18
Ergot, Active Ingredients of.....	561	Hymen, Operation for Imperfor- ate.....	34
Eclampsia.....	598	Hypodermic Medication.....	38
Esophagus, Dilatation of.....	607	Hernia, Treatment of Umbilical..	46
Endocarditis, Case of Ulcerative..	612	Hippurate of Soda in Acid Dia- thesis.....	47
Electricity, Therapeutic Proper- ties of.....	635	Hypodermic Use of Blood.....	48
Ears, Noises in.....	668	Hygiene in Japan.....	61
Epilepsy, Ligating Vertebral Arteries for.....	701	Hyperidrosis.....	107
Erythema Syphiliticum.....	772	Hernia, Ovarian.....	127
Epithelioma Treated by Resorcine.....	775	Hardening Microscopical Objects.....	128
Eczema, Salicylated Gelatine for.....	777	Hamburg Tea.....	144
Ear, Historical Sketch of Anat- omy.....	797	Hegar's Early Signs of Pregnancy.....	183
Electrolysis, Report on.....	806	Homogeneous Objectives.....	194
Electrolysis, Method of Using.....	808	Hernia—Operation—Cure.....	231
Ear, Unique Case of Injury.....	814	Hypnotics and Hypnone.....	241
Eczema, Anderson's Mixture for.....	331	Hopeine from American Hops... ..	243
Furuncles, Treatment of.....	27	Hernia, Specific Treatment of.....	247
Fuchsine in Treatment of Albu- minuria.....	30	Hemorrhage from the Kidneys... ..	257
Fibroids Complicating Labor....	31	Hydrastis, Dr. Wm. Judkins on Colorless.....	285
Foreign Bodies, Removal from Nose.....	40	Hydrophobia Treated by Pasteur..	286
Flint, Decease of Dr. Austin, Sr..	212	Hemorrhage in Pleuritis.....	368
Fever, Traumatic, How to Reduce.....	273	Hemoptysis Complicating Heart Disease.....	371
Forceps, Unjustifiable Use in Labor.....	304	Hemoptysis, Treatment of Profuse.....	403
Fagge, Dr., Work on Practice....	334	Hypodermic Injections of Cold Water.....	416
Fistula, Vesico-Vaginal..	395	Hemoptysis, Prescription for.....	417
Fallacy, A.....	426	Hypnotic, A New One.....	432
Fistula, Treatment of.....	468	Heart, Diagnosis of Diseases of... ..	443.
Filaria Sanguinis Hominis.....	473	Heart, Murmurs of.....	444

	PAGE		PAGE
Herpes Facialis.....	451	Infants, Cancer in.....	718
Hueppe's Classification of Bacteria	490	Infant Foods, Comparative Tests.	719
Holmes, Dr. Oliver Wendell..	504,	Intra-Pulmonic and Bacillide	
Hypnotism from a Therapeutic		Medicator.....	723
Standpoint.....	505	Intestinal Absorption of Fatty	
Hemorrhage, Persistent, from Ex-		Substances.....	725
traction of Teeth.....	539	Iron Lemonade.....	775
Herald and Presbyter on Physi-		Interviewing Doctors by Report-	
cians' Fees.....	568	ers.....	844
Hamilton, Dr. Frank, Death of..	574	Japan, Vaccination in.....	720
Heart, Palpitation of.....	584	Jefferson Medical College.....	792
Hemorrhoids, Ointment for.....	632	Knighting of Mr. Dalby of Eng-	
Holmes, Dr. O. W., in England..	646	land.....	69
Hippocratic Oath.....	647	Kissing, Danger of.....	430
Heat, Causes of, in Fever.....	657	Kidney Disease, Cause of Eclamp-	
Hernia, Inguinal, Radical Cure of.	659	sia.....	600
Hysteria, Effectual Treatment of.	691	Kidneys, Compensated Hypertro-	
Humerus, Ununited Fracture of..	695	phies.....	627
Hemoptysis, Formula for.....	703	Keratosi Follicularis.....	770
Hygiene of Old Age.....	713	Kidney in Diabetes.....	774
Helenin, A Destroyer of Bacilli..	735	Labor, Some Points in Manage-	
Health, Boards of, When Started.	823	ment of Natural.....	I
Hernia, Ether Spray Used.....	838	London, Medical Society of.....	35
Iodoform in Consumption.....	47	Lactic Acid and Tubercular Laryn-	
Iodine in Cholera.....	48	gitis.....	45
Induction of Premature Labor....	49	Labor, Induction of Premature....	49
Iodine in Malarial Disease.....	79	Laparotomy, Explorative.....	65
Irideræmia.....	111	Laudanum, American and British.	155
Impotence, Treatment of.....	121	Lung, Extirpation of.....	200
Indigestion, Carbolic Acid in.....	123	Labor, Case of Quintuple.....	214
Instinct as a Guide to Health.....	124	Labor Delayed by Obstruction....	233
Insanity, Overwork Related to....	143	Laparotomy for Pelvic Abscess...	260
Iodoform, Tubercular Meningitis		Labor, Method of Inducing.....	272
Cured by.....	168	Lawson, Decease of Dr. B. S.....	284
Incontinence of Urine, Treatment.	249	Lactopeptine.....	288
Illoway, Dr., Treatment of Ob-		Leucomaines.....	308
struction.....	283	Larynx, Fracture of.....	322
Iodides, Action and Elimination		Lewin, Note on.....	325
of.....	299	Legislation, Meddlesome Medical.	351
Iodides, Action on Diuresis.....	300	Lactated Food.....	360
Intestine, Resection of.....	320	Latin, Necessity of Understanding	428
Insane, Instruction of Attendants		Laparotomy Performed Under	
upon.....	338	Cocaine.....	439
Intubation of Larynx.....	359	Lactic Acid in Pathogenic Tissue.	462
Iritis, Discussion on Recurrent....	373	Lymph, Vaccine, Preservation	
Intestinal Obstruction.....	379	of.....	456, 458
Iodoform a Cure for Meningitis..	413	Locomotor Ataxia, Incipient.....	476
Ichthyol.....	419	Leg, Traumatic Swelling.....	538
Intestinal Obstructions Shown		Lepræ Bacilline.....	554
after Death.....	433,	Lactated Food, Fothergill on.....	575
Irrigation in Bowel Diseases of		Lupus Erythematosus.....	590
Children.....	468	Laparotomy.....	603
Inflammation, Pelvic.....	528	Lanolin, a Basis for Ointments....	628
Iron, Assimilation of.....	558,	Leucorrhæa, Prescription of an	
Illinois State Medical Society.....	565	Injection for.....	632
Inhaler, Improved.....	616	Larynx, Membranous Cast of....	658
Ingluvin.....	620,	Lung, Extirpation of.....	728
Iodoform in Knee-Joint Diseases.	626	Lupus Erythematosus.....	779
Insanity, Syphilitic.....	632	Language, A Universal.....	784
Iodoform, Poisoning.....	702	Lung, Gangrene of.....	824



	PAGE		PAGE
Lanoline in Obstetrics .....	839	Neurotherapy Based on Cerebral	
Livezey, Dr., on Lactopeptine....	856	Localization.....	832
Micro-Organisms .....	42	Opium Habit.....	44
Measurement of Red Blood Cor-		Osmic Acid in Microscopy.....	130
puscles .....	43	Obstetrics, Electricity Used in....	173
Mercury and Albuminuria.....	49	Objectives, Gundlach on Homo-	
Mineral Waters and Climatology		geneous.....	194
of the United States.....	57	Oxy-Hydrogen Microscope.....	269
Malarial Disorders, Treatment of		Obstruction, Intestinal.....	283
Certain Forms.....	73	Optical Instruments and Astigma-	
Morphia and Atropia, Physiologi-		tism .....	289
cal Action of.....	93	Ocular Inspect'n of Uterine Cavity	340
Menstruation, Painful, etc., from		Ohio State Medical Society.....	359
Flexion.....	102	Obstruction of Intestines.....	379
Malformation of the Eyes.....	110	Obstruction of Transverse Colon..	438
Malarial Fever.....	166	Ovaries, Removal.....	483
Malaria, Treatment of .....	167	Obstetrical Society of Philadelphia	533
Meningitis, Tubercular.....	168	Oleate of Mercury and Morphia...	776
Milk, Influence of Drugs on .....	191	Oxaluria .....	833
Meningitis in Children.....	197	Pessaries Use and Abuse of.....	19
Metric System.....	202	Pregnancy, Complicated by Fi-	
Microscopists, American Society		broids.....	31
of .....	215	Pertussis Treated by Cocaine.....	49
Meddlesome Medical Legislation.	315	Pregnancy, Vomiting in.....	50
Marriage, Consanguinity in.....	365	Polypi, Dr. Sims' Case of Remark-	
Micro-Organism, A New, in Con-		able Uterine.....	55
sumption.....	410	Physicians of New York Seeking	
Mammary Abscess, Prevention....	413	Protection. ....	72
Myrtol.....	415	Pericardial Adhesion, Contribu-	
Microcubes in Denque.....	431	tion to Diagnosis of.....	85
Menstruation, Irregular.....	483	Physiological Research in Action	
Milk Diet in Scarlatina Nephritis.	596	of Morphia and Atropia .....	93
Milk, Cow's Ordinary, Quality of.	614	Practitioners' Society of New York	97
Morphine, Subcutan. in Infantile		Pregnancy after Double Ovari-	
Convulsions.....	629	omy .....	127
Medical Education Abroad.....	642	Physical Diagnosis, Dr. Flint's	
Malarial Fever, Materies Morbi of	675	Work on.....	136
Mouth, Boric Acid in Diseases of	688	Peacock Chemical Company.....	144
Mercury (Calomel) in Diphtheria.	755	Pregnant Women, Watery Dis-	
Micro-Organisms, Destruction of..	761	charges of.....	162
Miscarriage, Prevention of.....	770	Potash, Permanganate, Dr. F. Bar-	
Mixture, An Inelegat.....	791	ker on .....	181
Minor, Dr. Julius F., Decease of..	792	Pregnancy, Early Signs of.....	183
Medication, New Forms of.....	853	Palate, Cleft, Method of Operating	
Neurological Society of New		for.....	199
York .....	39	Peritonitis, Surgical Treatment of.	201
Nose, New Mode of Removing		Pens, Fountain .....	216
Foreign Bodies from.....	40	Paralysis, Facial .....	217
Negro, Opium Habit in.....	44	Pathological Society of New York.	230
Nervous People, Gait of.....	46	Pregnancy, Vomiting During.....	271
Nervous System, Diseases of.....	133	Pasteur on Hydrophobia.....	286
Neuralgia, Local Remedies for..	388	Paralysis, Pseudo-Syphilitic.....	287
Neuritis, Multiple.....	398	Pathological Society of Rochester,	
Nævus of the Tongue.....	438	New York.....	303
Nashville Academy of Medicine..	522	Ptomaines.....	308
Neck, Glandular Enlargements...	537	Peacock's Bromides .....	360
Nausea in Pregnancy.....	551	Pleurisies, Hemorrhagic .....	368
Nervous Sensibility of Heart.....	586	Prescriptions of Sulph. Sparteine.	373
Nose and Face.....	717	Pasteur, Value of Researches.....	400
Nasal Catarrh.....	736	Pessaries, Indications for.....	405

	PAGE		PAGE
Placenta Previa, Management of..	408	Rabies Treated by Hoang-Nan....	626
Phthisis, A New Micro-Organism		Rheumatism Produced by Blood	
in .....	410	Poison .....	709
Paste, Organisms in.....	410	Rectum, Ulceration of.....	759
Pruritus of Women.....	415	Rectum, Gaseous Medication, per	774
Pure and Impure.....	427	Resorcine in Epithelioma.....	775
Psychical Impressions as a Hemos-		Rights, Equal, to Free Institutions	803
tatic.....	455	Sarcoma after Injury.....	35
Permangan. Potass., Treatment by	469	Softening of Corpora Striata. ....	39
Pneumonia, Pathogeny of.....	471	Salisbury Steak .....	45
Prescription for a Purgative for		Spinal Arthropathy.....	97
Children and Nerv. Cough.....	509	Sterility from Flexion... ..	102
Peritonitis, Treatment, etc.....	529	Sphacelinic Acid, Properties of... ..	116
Potass. Iodide, Unusual Benefits		Syphilis, A Constitutional from its	
from .. ..	537	Inception .....	117
Pyo-Pneumo-Thorax, Case of.....	577	Syphilis a Curable Disease.....	120
Pneumonia, Death from, Averted		Surgical Possibilities.....	126
by Phlebotomy.....	617	Smallpox, When to Vaccinate for.	132
Pasteur, Death of a Patient of....	648	Sanitarium, Cincinnati.....	140
Puerperal Albuminuria.....	665	Skin, Transplantations of.....	156
Phthisis, Prophylaxis of.....	679	Skull and Brain Substance, Loss	
Pregnancy and Parturition, Influe-		of .....	159
ence of Quinine .....	682	Syphilis, Dr. Ohmann-Dumesnils,	
Pathogenic Cause, Peculiar.....	684	Paper on.....	169
Pathology, Evolution in.....	687	Slaughter Houses of Philadelphia.	175
Parasites and Scorpions.....	693	Styptic, Rice as a.....	193
Precordia, Cold Applications to, in		Schuylkill County Medical Society.	221
Fever .....	695	Scarlatina, Ferruginous Prescrip-	
Peacock's Bromides.....	720	tion for.....	223
Pneumatic Cabinet, Use of.....	747	Sphincter Ani, Stretching.....	239
Parasite in Scrotal Concretions....	772	San Francisco Microscopical Soci-	
Placenta, Syphilis of.....	775	ety .....	269, 328
Pruritus Ani .....	778	Santonin in Amenorrhœa.....	270
Paraldehyde .....	779	Sartin's Mixture .. ..	273
Phthisis, Dietetics of Pulmonary..	828	Syphilitic Pseudo-Paralysis .....	287
Quinine in Chronic Malaria.....	74	Syphilis, Lecture on by Mr. Hutch-	
Quinia and Urea, Bi-Mur .....	76	inson .....	311
Quinine, Hydrofluorate of.....	203	Salicylic Acid in Rheumatism....	352
Quinia Sulph., Increasing Blood		Sparteine, Sulphate of.....	372
Corpuscles.....	557	Syphilis, Early Diagnosis and	
Resorcine in Epithelioma.....	47	Treatment.....	389
Rheumatism, Treatment of Acute.	50	Sugar in Urine, Test for.....	412
Rice as a Styptic .....	193	Sciatica, Hypoder. Injections of	
Rheumatism in Early Life.....	234	Water in .....	416
Ringworm, Treatment.....	248	Sutton, Dr. George, Decease of... ..	429
Renal Hemorrhage.....	257	Stomach, Malignant Disease of ...	437
Rectum, Discussion of Etheriza-		Syphilis, Secondary, Treatment... ..	536
tion by .....	296	Skin, New Affections of.....	571
Resection of Five Feet of Intes-		Scarlatinal Nephritis .....	594
tine.....	320	Suffolk District Med. Society.....	612
Rheumatism Treated by Salicin		Styptic, Essence of Turpentine as.	630
and Salicylic Acid.....	352	Scarlet Fever from the Cow.....	631
Resigned to the Inevitable .....	356	Spleen, Removal of.....	631
Rheumatism and Cardiac Compli-		Syphilis, Iodide Treatment of.....	649
cations.....	360	Syphilis, Treatment of.....	685
Railroad Accidents, Nervous Dis-		Skin, Beautifying of.....	697
eases after.....	454	Sweating, Persistent .....	698
Royal Lunatics .....	499	San Francisco Micro. Society—Ex-	
Rush, Dr. Benjamin, Monument to	501	hibit of Objectives.....	766
Ringworm, Hint on Treatment... ..	546	Syphiloma of the Face.....	769

	PAGE		PAGE
Starvation, Case of Voluntary.....	773	Uterus, Excision of.....	332
Strychnine, Urethran an Antidote	779	Uterine Cavity, Dilating of.....	340
Sanitary Science and Physicians...	816	Urine, Test for Sugar in.....	412
Sanitary Science, History of.....	820	Uterus, Removal per Vaginam....	483
Stomach Operations Performed		Uterine Neuroses.....	547
by Billroth .....	837	Uterine, Origin of Nausea.....	551
Salicylic Acid, Eruption Following	838	Urine, Test for Bile in.....	631
Sunday Observance.....	851	Ununited Fracture of the Humer-	
Tampon as a Support to the Uterus.	24	us.....	699
Tubercular Laryngitis and Lactic		Uterine Cavity, New Method of	
Acid .....	45	Dilating.....	741
Tobacco, Its Use by Boys.....	113	Urethran Used in Strychnine	
Transplantations of Skin of Frog.	156	Poisoning.....	779
Tubercular Meningitis.....	197	Vomiting in Pregnancy..	50
Typhoid Fever, Cases Treated....	224	Volume, A New.....	62
Testicle Undescended.....	231	Vick's Floral Guide.....	72
Tait, Professor Lawson, Letter on		Variola, Reports of Cases.....	227
Laparotomy.....	263	Vaginal Injections.....	314
Typhoid Fever, Prevention of....	288	Vullet's Method of Dilating Uterus	340
Typhoid Fever, Germs in.....	329	Vesico-Vaginal Fistula.....	395
Touch, Cultivation of Sense of... 361		Vertigo, Essential.....	439
Tubercular Meningitis, Cure for.. 413		Vaccination, Practical Observa-	
Thrombosis .....	444	tions on .....	456
Typhoid Fever.....	541	Vision, Sources of Danger to.....	509
Tendon-Grafting.....	630	Valentine's Meat Juice.....	569
Trachea, Membranous Cast of.... 658		Vinegar and Albumen in Lupus	
Tooth Powder, Qualities of.....	690	Erythematous .....	590
Trusses, Badly Made.....	696	Vaccination with Animal Lymph.	619
Tetanus, Puerperal.....	699	Varicocele, Radical Cure of.....	622
Topical Medication of the Lungs	721	Varicocele.....	672
Toothache, A Prescription for .... 735		Vertebral Arteries, Ligating.....	701
Tuberculosis by Inoculation.....	772	Wayne, Decease of Prof. Edward	
Tetanus without External Wound.	776	S., Chemist.....	71
Typhoid Fever, Jugulation of.....	777	Whisky, Poisonous Action in a	
Tracheotomy in Diphtheria.....	778	Child .....	221
Thread-Worms, Expulsion of.....	839	Waters, Purifying Polluted.....	418
Uterine Hemorrhage, Cold Injec-		Water, Dietetic Value of.....	540
tions in.....	18	Whooping-Cough, Resorcine in...	606
Uterus, Cases Needing Mechan-		Whooping-Cough, Remedy for... 631	
ical Support.....	22	Wakley, James G., Funeral of ... 644	
Umbilical Hernia.....	46	Woman, An Old .....	791
Uric Acid Diathesis, Soda Hippur		Wrong, A Judicial.....	846
in .....	47	Wesley, John, as a Physician.....	848
Urine, Dr. Forchheimer's Work		Wood Engraving.....	854
on.....	135	Wakley, Dr. James G., Latin	
Urea, Action of Iodides on.....	301	Poetry on Memory.....	855



# THE CINCINNATI MEDICAL NEWS.

VOL. XIX. No. 217.  
Old Series.

JANUARY, 1886.

VOL. XV. No. I.  
New Series.

## Original Contributions.

### Some Points in the Management of Normal Labor.

BY E. E. MONTGOMERY, M.D.,

President of the Clinical Society and First Vice-President of the Philadelphia Obstetrical Society.

Read before the Philadelphia County Medical Society. Reported for the  
CINCINNATI MEDICAL NEWS.

It is not so much the purpose of the writer to endeavor to present something original, as to re-survey old territory in the light of modern investigation and experience, and establish new landmarks for future guidance.

That labor is a physiological process, there is no questioning, but one so modified by our present civilization as to require, in the vast majority of cases, intelligent supervision to bring it to a satisfactory conclusion.

*Dilatation of the Genital Tract.*—One of the first problems that confronts the attendant, especially with the primipara, is how to accomplish the complete dilatation of the entire genital tract without injury to any of its parts—a problem, the solution of which involves, in a great measure, the future health and comfort of the patient. The partial accomplishment of this process may result in laceration of the cervix, uni, or bilateral, laceration of the vagina, separation of the latter from its attachments to neighboring organs, thus producing as sequelæ, relaxed and prolapsed vaginæ, cystocele, rectocele, etc., laceration of the vulva or perineum. Some of these lesions are very frequent in labor, and by their influence upon the subsequent processes of involution and

convalescence, entail untold discomfort and suffering upon the victim. With the knowledge of the production of these injuries, and their evil consequences, it behooves us to study the process of dilatation, and preserve the forces nature has provided to this end. The first, and most important to be considered, is the bag of waters. Under the influence of the uterine contractions, the uterus assumes a globular shape; as it contracts upon its fluid contents, the lower segment, decreasing progressively in thickness toward the os, affords the least resistance, and a bag of waters is forced against and into it with each contraction, dilating it by hydrostatic pressure.

This membrane becomes tense and relaxes with each contraction and relaxation of the uterus, until the os reaches a diameter of  $3\frac{1}{2}$ " , when it remains tense. The membranes are then generally considered to have fulfilled their purpose, and rupture is advised, if it has not occurred spontaneously. On this point Lusk says, "Something may be done in the way of shortening labor by puncturing the membranes as soon as cervical dilatation is completed. They have then fulfilled their physiological mission and their persistence simply retards the progress of the child's head." Playfair says, "When once the os is fully dilated, the membranes may be artificially ruptured, if they have not broken spontaneously, for they no longer serve any useful purpose, and only retard the advent of the propulsive stage." It is, however, sometimes difficult to determine the complete dilatation of the os. How often is it the experience of the obstetrician to rupture the membranes at this point of apparent complete dilatation, to find a rigid os contract before the foetus, to be slowly and painfully distended by the unyielding head. This would be avoided should we follow the advice of Blundell, when he says, "In general, commit the rupture to nature;" or Moreau, saying, "Better is rupture late than too early."

But is it necessary the membranes should be ruptured? May they not still serve a useful purpose in the further dilatation of the vagina and vulva?

By rupture of the membranes, as is the common rule, we still have the undilated vagina and vulva to overcome, and with a hard and unyielding body. The vagina is often pushed in folds before the head, while the pressure, besides endangering the vitality of the parts pressed on, interferes with the venous circulation of vulva and rectum, adding to

the probability of distress from hemorrhoids during convalescence, and increases the danger of laceration in the engorged tissues of the vulva and perineum.

H. T. Byford has shown the importance of preserving the membranes. After the completion of the dilatation of the os, the process of labor is not arrested, as some authorities would have us believe, but the contractions of the uterus separate instead of stretch the membranes, so that the bag precedes the head into the vagina and through the vulva, dilating the entire canal and preventing a thin membranous perineum being caught before the child's head. The membranes may be ruptured before the head emerges, so that the child shall not be strangled in the water.

During the first stage of labor the patient is usually directed to sit up or walk about. Such a course, however, increases the tendency to rupture, hence she should be kept lying down, and when the pains are severe and frequent they should be abated by tinct. op. deod., by mouth, or morphine hypodermically. Besides modifying the severity of the pains and relieving the nervous irritability of the patient, opium renders the cervix more readily dilatable and thus expedites the labor. When the os becomes so dilated as to render the membranes tense, it is better to place the patient upon the back, so the head may fall against the os and assist in the dilation.

In spite of every precaution the membranes may spontaneously rupture. When such occurs nature may be imitated by distending the vagina with an inflated gum bag, or Barnes dilator, or the vulva and vaginal outlet may be dilated as Mossmann suggested, by drawing backward upon it with two fingers inserted into the vagina with each pain.

*Anæsthesia.*—The necessity and advisability of administering anæsthetics in normal labor is still a mooted question. It is not that the severity of the pains in the second stage are depreciated, for they have been spoken of as affording "distress beyond description," to which was applicable no other name than "agony;" but most probably, for want of a safe and convenient anæsthetic. Chloroform has been most frequently given. It is generally regarded as free from danger, when administered to the parturient woman, but cases are on record of death in labor after inhalation of small quantities of this drug.

Profound chloroform narcosis arrests both voluntary and involuntary contractions. It is, however, only necessary to

administer it with the advent and during the pain, allowing the patient to recover consciousness in the interval; but even so administered, there is a feeling that it decreases the power of the uterine contractions and increases the tendency to uterine inertia and post-partum hemorrhage. Still, these disadvantages are not so significant as to outweigh the advantage of relief from pain, were we not under the ban of the not unfrequently fatal cases in surgical practice.

Although ether is generally preferred in surgical practice, for its greater safety, it is less desirable in obstetrics, because the control of the patient is diminished unless she is profoundly etherized. Its inflammability makes its use dangerous in a close room at night. Tait directs attention to the fact that ether rapidly enters the foetal circulation and increases the peril of the foetus. He says this danger was indicated by Simpson.

We have in the bromide of ethyl the ideal anæsthetic for obstetrics. It is safe, acts quickly and is rapidly eliminated. It produces no deleterious effects upon either mother or child. It is administered by pouring a few minims to a drachm upon a folded napkin and holding it over the face of the patient with the advent of the pain, removing it as the latter ceases. The pain of the second stage of normal labor may be thus abrogated, without at any time interfering with consciousness. The patient is capable, throughout, of co-operating with her attendant, or withholding her efforts, as may be required. It does not decrease the power of the involuntary contractions, while it materially increases the power to render voluntary aid by removing the fear induced by pain. The writer has used it, with few exceptions, in all cases during the last two years, without observing any unpleasant results from the practice.

*Prevention of Laceration of the Perineum.*—Where the membranes are preserved unruptured until the vulva is dilated and the head about to emerge, the probability of perineal laceration is extremely slight. It is not intended to consider the question further here, than to direct attention to the excellent plan for preventing this lesion, suggested by McGaughey. It consists in placing the patient upon her left side, with a good-sized roll between the knees. The attendant sits upon the bed at her back, passes the left hand over the abdomen, between the limbs, and with the fingers smooths the scalp and draws the head forward as it emerges from the vulva, The right hand may be used to note the



progress, or when the perineum is well distended, to expedite the delivery, by placing the fingers and thumb on either side the anus, against the protruding mass, *i. e.*, grasping the child's head, enveloped by the perineum and pushing it forward. The left hand holds the head away from the tendinous center of the perineum while the right extrudes it, at the same time reinforcing the center by crowding toward it from the sides.

*Delivery of the Placenta.*—To the careful student, it is evident that every stage of labor demands his most earnest attention, but particularly is this true of the third stage, where mismanagement may mar the future comfort or even destroy the life of an individual.

From the earliest times the removal of the placenta has commanded the most serious consideration.

At the present day there are three recognized methods of conducting the third stage of labor. 1st. That of pure expectancy, resting upon the ancient, therefore, honorable, foundation, "Meddlesome midwifery is bad." 2d. The Dublin method, and 3d. Crede's method.

The expectant plan consists in permitting the uterus to expel the placenta and secundines, unless their removal is required by hemorrhage or some untoward accident. A superstitious idea pervaded the middle ages, that the retention of the afterbirth portended evil to the parturient, hence its removal by force was urged. This idea was corrected by Ruysch, in Holland, and later by Smellie, Denman and Hunter, in England. When the Dublin method, and later, Crede's, were introduced, it was supposed this vexed question had reached its solution. Within the last five years, however, the question has awakened renewed interest, owing to the reaction on the part of Dohrn, Ahlfield, Kabierske, and others, against the teaching of Crede. While admitting that the delivery of the placenta may be expedited by Crede's method, often without trouble, they base their principal objection upon the increased danger of the retention of the decidua and the production thereby of hemorrhage, putrid processes, and long continued lochia. They claim that the separation of the placenta is due to the accumulation of blood behind it, which gradually completes its separation. Ahlfield formulates two propositions: 1st. The natural powers of normal labor are sufficient for the perfect separation of the afterbirth and the completion of the placental stage, and do so much better

and more completely without artificial aid than with it. 2d. The expectant treatment of the third stage is free from danger. Kabierske, in the Strausburg Clinic, employed the expectant treatment purely. In one hundred cases, the stage was completed within three hours in sixty-nine; in one not until twelve. He cites the fact that Ritgen permitted the placenta to remain days in the genitalia, so long, indeed, that the odor became unbearable; that Stark, of Jena, in absence of incident, waited for the placenta principally until the third day, while Crantz, Plenk and Aepli described cases where the placenta was retained from four to fifteen days without disadvantage.

If the retention of the whole placenta is so innocent of danger, it is hard to understand why a portion of the membranes should be so obnoxious.

The complete separation of the membranes is more certain under the expectant plan, but it offers the disadvantage of being more likely to be followed by hemorrhage, relaxation of the uterus and formation of blood clots, which, by decomposition, increase the danger of sepsis. The procedure also permits irregular contraction of the uterus, with incarceration of the placenta, necessitating more frequent introduction of the hand.

Admitting that the plan is safe, is there any reason why the physician should waste an hour—yea, hours, as the zealous advocates of the expectant plan advise—in waiting for nature to complete the delivery of the placenta?

As Baruch pertinently says, "Why should the accoucheur sit at the bedside, with the hand upon the uterine globe, in uncomfortable expectancy, while the woman, who has just passed through the most fearful ordeal of her life, demands again and again, in plaintive accents, 'Doctor, am I not yet done, after all I have suffered? What is the matter? Am I in danger? When will I get through?' and many other queries indicating an anxious suspense, whose moral effect must be more or less detrimental."

The Dublin method, as introduced by Clark, and followed by Collins and McClintock, consists in the following down the uterus with the hand as the foetus is driven out, securing firm contraction and then applying the binder. The process may be completed by traction upon the cord or placenta.

The foundation of Crede's method is the aphorism, "The uterus itself should expell the afterbirth, and the sooner it does it after the expulsion of the foetus the better." As

Playfair has said, "The cardinal point to bear in mind is that the placenta should be expelled from the uterus by a *vis a tergo*, not drawn out by a *vis a fronte*." An objection to Crede's method is that through it the normal course of the third stage is violently disturbed, and as a result, retention of the membranes occurs more frequently, and consequently, more frequent disease in childbed.

It should not, however, be performed in such a way as to press or crush the placenta out of the uterus. The method is intended to awaken the uterine contractions. The placenta separates itself from the uterine wall, in the layer in which the cohesions is the least. The relative results of expression and expectancy are shown by the following statistics of Dr. Weis, at Copenhagen: by which the only advantage shown is that there is less frequent retention of membranes, while, contrary to what would be supposed, secondary hemorrhage is less frequent:

CASES TREATED.	EXPECTANT.	EXPRESSION.
	Per cent.	Per cent.
Post-partum hemorrhage . . .	5.78	2.3
Manual removal of placenta . .	1.33	0.64
Retention of membranes . . .	1.78	2.3
Secondary hemorrhage . . .	0.77	0.32

Of the Dublin and Crede methods, the latter is the more active and, therefore, likely to leave portions of membrane, though the importance of this is questioned. A combination of the two, as Smyly suggests, would be advantageous. Thus, with the hand follow down the uterus as it expels the child, and make the contraction energetic and permanent. Never remove the hand unless compelled to. During contraction, press the uterine walls together and the whole organ toward the coccyx. When flattening of the uterus shows that the placenta has been expelled from it, drive it from the vagina by strong pressure downward. The other hand should receive the placenta at the vulva and hold it, while the uterus recedes. The placenta is then withdrawn until the membranes are put upon the stretch, and so held until the uterus relaxes its grasp upon the membranes.

*Antiseptics.*—The view of Semmelweis and Hervieux, that puerperal fever is due, as a rule, to the septic inoculation of wounds induced by the separation of the decidua and the passage of the child through the genital tract, is now, with but few exceptions, accepted. The acceptance of the theory of blood-poisoning in surgery had much to do in bringing this about. It is now mostly accepted that puerperal fever



is a species of blood-poisoning resulting from the importation of putrefactive material from without, or its generation in the body of the individual—auto-infection. The source of origin in some cases may be in an old accumulation from chronic peritonitis or salpingitis. Barnes divides the poison into endo-sepsis, auto-sepsis and exo-sepsis. But it is to be questioned whether the second ever occurs.

The disease may be divided into traumatic and putrefactive. The former is simply the febrile reaction arising from the genital lesions, pursues a mild course and terminates favorably; the other is characterized by high temperature, and the symptoms of septicæmia, pyæmia or septicopyæmia.

It needs only the demonstration of the decrease and almost banishment of the disease under prophylactic measures, to justify the view of the disease being carried to the patient from without.

At Bischof's Clinic, Basle, the mortality in 1868 was 6.4 per cent. or 1 in 16.

After antiseptis, in 1882, it became 1.6 per cent. or 1 in 63.

At the Maternity, Paris, from 1858 to 1870, the mortality was 9.31 per cent. or 1 in eleven. After the introduction of antiseptis by Tarnier it became 2.37 per cent. or 1 in 43, and later, with stricter measures, 1 per cent. or 1 in 100.

In Tarnier's private ward, in 608 deliveries there was not a single death.

Accepting the theory of infection as proven, it becomes an important question as to the physician's duty regarding obstetrical cases, when he has been infected by contact with sepsis, either in autopsies, puerperal fever, erysipelas, or cases of septicæmia, how long shall he wait, and what precautions take, before attending cases of obstetrics? This question has been answered variously. Winckel pleads for two weeks' exclusion; Zweifel says the infected hand should not be brought in contact with the genitals of the lying-in woman for one week. Schröder recommends two days. E. Martin, twenty-four hours. Spiegelberg gave the advice to undertake no obstetrics if one had to do shortly before with wound products, cadavers, or with infectious diseases. Löhlein gives the most reliable advice, however, when he says, "Septic germs are not killed by time, but by strict disinfection."

Antiseptis consists of absolute cleanliness upon the part

of the physician and nurse, and the withholding from the patient of every possible opportunity for infection. Before examining the patient, the physician, after careful washing of his hands with soap and hot water, should immerse them for several minutes in a 1-2000 solution of mercuric bichloride. He should also see that the hands of the nurse are subjected to the same process.

The external genitals should be carefully washed and the vagina syringed with the same solution. Where the labor is tedious, the latter should be repeated. Vaginal explorations should be made as infrequently as possible, rather depending upon external examinations for determining the position of the foetus and the progress of labor. The fingers for examination, and instruments, when used, should be lubricated with borated vaseline 3j to 3j. The instruments should be previously immersed in hot water, or preferably in a 10 per cent. solution of carbolic acid.

After completion of the third stage of labor firm contraction of the uterus having been induced, all lacerations of the external genitalia should be stitched, and when manual or instrumental interference has been necessary, the vagina, or even uterus, washed out with the 1-2000 sublimate solution. Where, however, there was no such interference with the course of labor, nor laceration of the external tissues, it is better to content ourselves with careful cleansing of the external parts with the solution, making sure that no clot or trace of blood is left in the hair covering the genitalia.

The subsequent treatment should be directed to preventing the entrance of septic germs, and securing the rest necessary for repairing the lesions of the genital tract. The binder and pad are applied to support the uterus and keep it in a state of energetic contraction. The latter is promoted by the administration, three times daily, of quinine, ergot and tinct. digitalis, for the first week. An aperient the second day aids nature in the elimination of any poison that may have found entrance. Where no laceration has occurred, drainage should be promoted by having the patient sit up on the commode to pass water and evacuate the bowels.

Many authorities have recommended the daily, yea several times daily, employment of carbolized or sublimated vaginal injections, but such treatment interferes with the proper rest of the parts, tears afresh the wounds, and endangers the introduction of septic material.

Experience has shown that vaginal, and much more, intra-

uterine injections, in the absence of septic symptoms, are not only valueless, but positively injurious, and has led such men as Baker, Thomas and others, to revise their earlier teaching. We need but to compare the results in the following table, prepared by Baruch, to convince ourselves of the truth of this statement :

HOSPITALS IN WHICH INJECTIONS ARE PRACTICED.	Mortality per cent.	HOSPITALS IN WHICH INJECTIONS ARE NOT PRACTICED.	Mortality per cent.
Charitè (Hartmann).....	2.5	Pavillon, Tarnier, Paris, 1880 to June, 1883.....	.0
Charitè (Gusserow), av. 1879-81, inclusive .....	1.5	Prague Maternity, 1880 (Breisky & Weber).....	0.46
Charitè (Gusserow), Summer- brodt, 1882.....	1.6	Prague Maternity, 1880 (Breisky & Weber).....	0.56
Maternity at Parma .....	3.42	Breiskey (Fischel), 1881.....	0.21
Glasgow Maternity (new build- ing) .....	1.56	Breiskey's Ward alone, 1882... ..	.0
		Copenhagen Maternity, 1880.....	0.26
		Copenhagen Maternity, 1881.....	0.5
		Prague, 1883, 1,100 cases.....	.0
		N. Y. Maternity, 3d series, Dr. Garrigues .....	.0

The lochial discharge from the vulva is the principal source of the entrance of septic germs. Garrigues suggested keeping the vulva covered with a pad of lint saturated with a 1-2000 sublimate solution, and this with oiled silk and cotton. Where there is a free bloody discharge, however, this obstructs its exit, and sometimes causes the uterus and vagina to be distended with a clot. Careful cleansing of the external genitalia, every six or eight hours, with the sublimate solution, and the application of clean napkins meanwhile, seems to answer well. The putrefaction of the lochia takes place where it comes in contact with the air, and the poison is transmitted to the parts above. The frequent washing prevents such change. Nurses and midwives should be impressed that it is not only the discharges of puerperal patients that are poisonous, but their hands may be the media for conveying infection, after handling any decomposing materials, as meat, in the kitchen, dressing cancerous sores, touching menstrual blood, etc.

Of the antiseptics, greater prominence has been given, in the above remarks, to the value of corrosive sublimate. From its great power as a germicide, one would naturally expect great benefit from this agent in an infectious disease.

Carbolic acid can not be used in sufficient strength to destroy germ life, without burning the tissues.

That the sublimate solution has proven in practice the most reliable agent, the experience of Williams, in the London Lying-in Hospital, goes far toward demonstrating. During four years, in 1,174 deliveries, seven deaths occurred, a little more than 0.5 per cent. In the first twelve to eighteen months carbolic acid was used; during a second similar period permanganate of potash, and since May, 1884, corrosive sublimate. In the first two periods there was considerable illness, though the mortality was low. With the use of corrosive sublimate there were no deaths and an almost entire absence of morbidity.

In conclusion, we would formulate the following creed:

1. The hydrostatic dilating force of the first stage should be preserved until the genital tract is completely dilated, and imitated when lost.

2. The vital forces of the patient should be economized by the abatement of pain in the first stage, by opium, in the second, by the bromide of ethyl.

3. The uterus should be encouraged to complete the third stage as soon as consonant with the entire discharge of the placenta and secundines. This should occur by expression, not traction upon the cord.

4. The most strenuous precautions should be taken, during labor and subsequent convalescence, to prevent the development of putrefaction.

1305 N. Broad Street.

---

## A Case of General Cirrosis.

---

BY W. J. MILLER, M.D., FOSTERVILLE, TENN.

---

JUNE 15th, 1872, I was asked to examine Mrs. Rodes, of Fayetteville, Tenn., a married lady, age 30 years, mother of seven living and healthy children.

Mrs. Rodes said she had been complaining more or less since the birth of her last child, which was now two years old, but that she had been under the care of a physician only for about nine months.

Her pulse was 60; temperature, 99°; tongue coated with a dry brown fur; bowels constipated, going frequently



seven days without being moved; kidneys acting well; appetite good and food comfortably digested; sleep sound but not refreshing; menstruation regular; no tenderness to be found over womb, liver or spleen; nor had the patient felt any pain or uneasiness in these regions.

Her skin was dry and hard to the touch and of a dark brown color; around her neck, and in the armpits, on the inside of her arms and thighs, it was almost black. The areolar tissue beneath the skin was thick and hard. Pressure caused no pain, but on pinching up the skin between the thumb and finger, she would cry out with pain. Her eyelids were stiff and thickened and difficult to open for some time after waking. The cartilages of her nose were stiff and sore; the skin and muscles of her face were drawn, making it difficult for her to open her mouth wide enough to take food; at times she had a tight drawing sensation over the entire body.

I found no abnormal sounds over the lungs or heart, except the weak, sluggish action of the heart, 60 contractions to the minute. Mrs. Rodes was the youngest of a family of ten children, of German and English extraction, and, with the exception of one or two spells of fever, she had enjoyed good health up to her present ailment. Her father died at 71, of general debility, having been a great sufferer from indigestion. Her mother died at the age of 52, from rheumatism, having enjoyed good health the first fifty years of her life, and given birth to ten children. There were four boys and six girls; the boys are alive and stout men. Only one girl is left; one died of croup in childhood; her eldest sister, mother of four children, was blind with cataract four years, died at the age of 51 with disease of the lungs and heart; her second sister died at the age of 51, having borne seven children, four of which died with chronic disease of the glandular system, ending in suppuration and general consumption; her third sister was married twenty years, had irregular menstruation all of her life, died sterile at the age of 43; had pneumonia in January, and died the October following with pulmonary consumption.

I diagnosed Mrs. Rodes' case disease of the nervous system, affecting the liver and bowels directly; indirectly, the skin and areolar tissue. My learned friend and teacher, Prof. T. L. Madden, a little later in the disease, suggested that it might well be called general cirrhosis of the areolar tissue.

I advised my patient to give up a protracted meeting she had been attending day and night for several weeks; told her she did not have rheumatism now, whatever might have ailed her previously. I ordered for her: *R.* Potassium Iodide dr. ij, Sodium Bicarb dr. j, Aqua Dist. oz. vij. Dose, a dessertspoonful three times a day before meals. Colchicum Wine, M. xx, twice daily. A full nutritious diet, sulphur water as a drink, open air exercise, warm bath every night, followed by brisk rubbing with a coarse towel.

The colchicum acted well on the intestinal canal, the bowels being thoroughly moved; it was given only as it was necessary to keep them open; the potassium was pressed to its physiological effects.

July 15th her pulse was 100, temperature 100°, respiration about normal, kidneys acting well and urine normal, skin not so hard and dry—had changed from a brown to a purple color. I now put her on the comp. phos. pill of Dr. Maddin. *R.* Arsenious Acid gr. v, Strichnia gr. iij, phosphorus gr. ij, Aloes (soc) fi. Ft. 100 pills. Dose, 1 pill three times a day, before meals, and continued Pot. Iodide grs. v, three times a day, with diet and baths as above. This treatment I followed for six weeks, and occasionally gave Morphia Sulph. gr.  $\frac{1}{4}$ , hypodermically, at bedtime.

My patient improved in appearance, and, on exertion, a slight perspiration could be discovered, which she had not noticed for twelve months. Being much interested in the case, I asked to have Dr. R. F. Evans, ex-President of the State Medical Society, to see her with me. Our consultation was held August 24th. He thought the case very peculiar, and that the bronze skin would seem to indicate Addison's disease. He advised treatment continued, suggested that the rubbing be followed by olive oil inunctions. This suggestion I accepted, with both comfort and benefit to the patient.

September 10th, seeing no substantial improvement in Mrs. Rodes' condition, I asked her husband to have Prof. T. L. Maddin to see her with me; this he agreed to. I accompanied her to Nashville, and Dr. Maddin saw her September 12th.

He said he regarded the case as one of general cirrhosis, involving the areolar tissue of the entire body; and though decided and free to commit himself to this conclusion, he acknowledged he had never met with a similar case. He suggested that we call in other medical gentlemen of Nash-



ville, as the case was peculiarly interesting, and one undoubtedly of rare occurrence.

Profs. T. Menees and T. O. Summers were invited to meet us. The lady sat up during the examination. Pulse 110, temperature  $101\frac{1}{2}^{\circ}$ , tongue dry and red, bowels moved by the Aloes pills, urine normal as examined by Profs. Maddin and Summers, skin dry, of a dull varnish color, tightly drawn over the entire body; the areolar tissue thickened and hard, tendons of fingers shortened, eyelids stiff and thickened, the expression of facial muscles destroyed by the tight and hard condition of the tissues covering them. She suffered no acute pain and no tenderness over the organs suspected of being diseased, menstruation regular, appetite good, sleep sound, but not refreshing. In the consultation there was perfect harmony, and this was a time when doctors did agree.

Prof. Maddin suggested that Ammon. muriate gr. xxx, three times a day, be added to treatment, and arsenious acid, in addition to the compound tonic pill, be cautiously given, to the point of tolerance, and urged the continuance nightly of friction with crash glove to the entire body for thirty minutes, to be followed with half a teacupful of best olive oil by inunction.

Prof. Summers suggested that we substitute for the tepid water bath, a sulphur vapor bath; Prof. Menees said the suggestions met with his hearty approval, and they were agreed to continue the other treatment as above.

October 18th, was summoned hurriedly, and found my patient suffering with nausea, vomiting, irritation of throat and stomach. She complained of her tongue feeling stiff and heavy; was now taking gr.  $\frac{1}{3}$  of arsenious acid each day. I stopped the arsenic, except that in compound tonic pill, gr. 1-20, three times a day; gave a full dose of castor oil, and continued treatment as before. She gradually declined in strength, and by the last of October the tendons of her extremities began to draw and shorten considerably; the left side more than the right, so that the legs, arms and fingers were held in a semi-flexed position. It was necessary to carry her to and from the buggy on taking her daily drives, but she seemed to be refreshed by them.

November 2d, she complained of weakness and nausea after the sulphur vapor bath. I directed them every fourth night, but to keep up the nightly inunctions of olive oil.

November 7th, she asked to be allowed to stop the vapor

bath entirely, claiming that it had burned the ends of her fingers. I found on the tips of the first two fingers of the left hand, a hard dry sore, that looked something like a burn. I insisted on her following directions, and explained to her that the sore fingers could not be caused by the sulphur vapor.

November 16th, on my arrival, she told me I would have to give something to relieve the pains in her fingers; that she could not stand it any longer. The first three fingers on the left hand, and the first two on the right, were sore and very painful, coming on in paroxysms. I convinced her that all kinds of poulticing and lotions were useless and perhaps injurious, and directed Chloral Hyd. gr. xv, Potassium Brom. xl, in water, every eight hours, and to continue other medicine. The chloral and bromide gave comparative relief for several days, but in time lost its effect.

While I was off attending the A. P. H. A., another physician was called to see her. Leaving off all other medicine, directed his treatment to controlling the pains in her fingers, which had grown frightful; he prescribed Morphia Sulphas. q. s. every four hours, and, at the earnest solicitations of her friends to relieve her fingers, he split the forefinger of the left hand to the bone, hoping to find pus; but in this he was disappointed, both in not finding pus and in not relieving the pain. The operation itself was not felt by the patient, as she expressed it, "any more than if he had been cutting a stick."

On my return, I put her again upon the Comp. Phos. Pill, for I considered it the sheet-anchor in her case. I also prescribed Fougere's Iodized Cod Liver Oil and Trommer's Extract of Malt with Hypophosphites, three times a day, after meals, in a glass of sweet cream; kept up the olive oil inunctions, nightly; for the pain in the fingers I used 5 to 10 drops of the following formula, hypodermically: R. Sulph. Morphia. grs. xx ss., Neut. Sulph. Atropine gr. i, Dist. Water oz. x, M. and ft. sol. The oil and malt soon became nauseating, and were thrown up undigested, necessitating their discontinuance.

December 1st; the helix of her ears, the ends of all her fingers, elbows, maleoli, bottom of her heels and tips of her toes were all in a state of dry gangrene and very painful; the pain coming on in paroxysms at intervals varying from one to four hours, and lasting from 10 to 15 minutes. After an injection of morphia and atropia, the paroxysms were short

and lighter, but if the effects of the medicine were passing off, it was longer and very intense; the patient praying for her extremities to be cut off. Her appetite had been good, but now failed; the pill could no longer be retained. I prevailed on her to take sweet cream and stimulants.

She had grown very weak and the tendons had shortened until they felt like a tightly stretched cord; her chin was drawn forward on her breast. In this condition she lay for three weeks; her skin brown; suffering the most excruciating pain; begging to die that she might avoid another paroxysm. "The pain (she said), felt like she had her fingers, heels and toes in a vise, and the paroxysm came on like you would begin slowly to screw up the vise, and left like you were turning it off."

During these three weeks her only medicine was the morphia and atropia solution, 10 to 15 drops hypodermically, every eight hours; at times in order to control pain and prevent convulsions, I was forced to give it every four hours. Between the paroxysms this would dilate the pupils, the patient could scarcely see; caused deep sleep, with eyes and mouth open, and stertorous breathing; though in a paroxysm, she would get entirely from under the influence of the medicine. Her food was stimulating and nutritious; consisting of sweet cream, soft eggs, egg-nog, milk punch, cream and toast, whipped cream, iced wine and whisky. Her bowels were very much constipated and moved only by enema; urine scanty, highly colored and very offensive; pulse 100 to 180; temperature  $99^{\circ}$  to  $102^{\circ}$ . Her mind was active, she reasoned well, and often introduced strangers that might meet in her room. While asleep she was dreaming and talking incessantly, mostly about incidents of her girlhood.

December 20th; I noticed that my hypodermic needle was introduced easier; on looking at the puncture I saw it had been inserted through a split in the epidermis, and on close examination found several such places.

December 23d; I discovered cracks in the palms of the hands and soles of the feet, a general softening of the skin and areolar tissue, and that the paroxysms were less severe and not so frequent. Her finger tips were black and dead; the finger that had been split was in a mummified condition to the middle of second phalanx. The sores on her ears, elbows, maleoli, heels and toes were dry and black. I ordered olive oil inunctions now twice daily and kept the

elbows, hands and feet wrapped in soft cloth saturated with oil.

December 30th; desquamation of the scarf skin had commenced over the entire body; the paroxysms grew milder, and the patient rested well with ten drops of the morphia sol. three times in twenty-four hours.

Her appetite began to improve, the dry, brown tongue cleaned off, the tendons began to relax and the improvement was very marked. Prescribed the following mixture: *R.* Podophylin gr. ij, *Sp.* of Wine dr. ij, Essence of Ginger dr. iij. Dose, one teaspoonful in a wineglass of water every night at bedtime; this soon relieved the constipation. I gave her as a tonic, wine of iron and beef, which she took with relish.

January 30th, 1880; the scarf skin of the entire body had peeled off, leaving a soft, clear, smooth skin thickly set with fine, downy hair, which the patient said she had never noticed being on her before, even when in the best of health. She really looked like a new woman, and her husband remarked that his wife was beginning to look like a white woman again. The sores began to heal and the ends of her fingers to fill out, except the forefinger of left hand, which had to be amputated between the first and second joints.

February 15th; she was able to be up most of her time, appetite good, bowels regular and was gaining flesh.

February 29th; she was sitting up, eating heartily, sleeping well and gaining flesh rapidly, but not getting her strength so fast; not able to walk, but could use her hands in making her toilet or feeding herself, and all the organs of life seemed to have received new energy.

March 20th; feet swelled a little, appetite good, urine scanty and red, complained of a burning pain after voiding urine, rests well, pulse 100; temperature  $98\frac{1}{2}^{\circ}$ . Prescribed *Sp.* Chloroform twenty drops, *Tinct.* of Digitalis ten drops, *Cit.* of Pot. grs. xv. *Tinct.* Buchu. dr. j. at bedtime, in a glass of water. This acted well on her kidneys, changed color of urine and relieved swelling in feet.

March 18th; she was sitting up most of her time, free from pain, gets cheerful and expressed herself as feeling very well.

March 21st; she was taken suddenly with a faintness and tired sensation through the chest while dressing; her husband assisted her to bed and she soon got better, but continued very restless through the night.



A physician saw her at 4 A. M., March 22d ; he informed Mr. Rodes that his wife was in a very dangerous condition like acute pneumonia. Mr. Rodes at once telegraphed for me ; I saw his wife at midnight, thirty-six hours after the commencement of this paroxysm. She was in a dying condition, pulse 135, a cold, clammy perspiration, dullness on percussion over right and upper part of left lung ; the stethoscope told that but little air was passing into either lung ; breathing very labored, using the diaphragm almost entirely ; she sunk rapidly and died at 4:30 P. M., March 24th.

#### REMARKS.

The title of this paper, "General Cirrhosis," is something new in medical nomenclature, and so far as I know or have been able to learn, this is the first case on record.

We have cirrhosis of the liver, of the lungs, of the kidneys—one form of Bright's disease—and no doubt as in this case, cirrhosis of the suprarenal capsule, giving in fact the typical discoloration of the skin.

Cirrhosis is always a chronic inflammation of the connective tissues with a new growth. The law prevailing with the new areolar tissues is progressive contractions, as in cicatrix. As a result of this, there is continued thickening and hardening of the tissues, and consequently pressure on the blood vessels. Hence congestion of the capillaries, arrested function and the mechanical transudation of serous liquid.

In Mrs. Rodes' case, the areolar tissue gradually shrinking, tied the skin down around the muscles and bones of the fingers and toes and other portions of the body, and by pressure of the nerves caused the agonizing pain, and finally, obstructing circulation, the result was dry gangrene.

---

HOT AND COLD INJECTIONS IN UTERINE HEMORRHAGE.—Drs. Schwarz and Graefe have determined that hot water (T. 120° F.) stimulates muscular contraction and produces œdematous swelling of the tissues ; but, when not effectual in completely checking the hemorrhage, should be immediately followed by cold water, which continues and strengthens the uterine contractions without interfering with the swelling of the tissues, which constitutes the second factor in controlling the hemorrhage.



## Selections.

### The Use and Abuse of Pessaries.

[Concluded.]

Read before the Atlanta Society of Medicine,  
BY VIRGIL O. HARDON, M.D., ATLANTA, GA.

[Taken from the *Atlanta Med. and Surg. Journal*.]

THE effect of a pessary upon the cause of this train of symptoms would be *nil*. But if the object of its use be to relieve the disagreeable symptoms only, that object will probably be accomplished. In using a pessary, it is necessary that the fact should never be lost sight of that the symptoms whose relief is sought are due to the settling down of the womb into the pelvis, and to that alone. This may be demonstrated by lifting the cervix upon the finger in the vagina while the patient stands. Unless the womb be bound down by adhesions, it will be found that there is a certain point of elevation at which the traction upon the ligaments, the pressure upon the bladder and the obstruction of the circulation are relieved, as shown by freedom from pain and discomfort. If the womb can be held at that point, the symptoms are relieved, and it is for this purpose alone that a pessary can be advantageously used. Whoever expects to accomplish more than this will be disappointed.

A not uncommon error consists in so applying the pessary as to raise the womb above its normal position in the pelvis, thereby producing essentially the same symptoms that result from a corresponding degree of depression. Traction on the broad ligaments and the neck of the bladder, with derangement of circulation, will result as readily from displacement upward as from displacement downward. Hence, in applying a pessary, it is necessary to first ascertain the point of elevation at which the patient is most free from pain and discomfort. The pessary should be so fitted as to hold the womb at that point. Fritsch says that the normal mobility of the womb is such that it may be pushed upward an inch and a half without discomfort.\* But my experience has taught me that any attempt to raise the organ much above its normal

\*Review in *American Journal of Obstetrics*, July, 1881, page 707.

position in the pelvis will produce pain and will defeat the objects for which a pessary is applied. The normal position of the uterus has been the subject of a great deal of discussion and has never been satisfactorily determined, and of necessity it never can be determined, for it varies greatly in different subjects, and even at different times in the same subject. But when the point has been found at which the uterus exerts the least interference with surrounding parts, as shown by the degree of pain and discomfort, it may be concluded that its normal position has been determined for that individual case.

The one great contraindication to the use of a pessary is the existence of inflammation in any part of the pelvic cavity. The merest tyro in gynecology would hesitate before applying a pessary during an attack of acute pelvic cellulitis. But the fact is not sufficiently appreciated that it is equally improper to do so as long as there is any tenderness or hardness in any part of the pelvis. In its normal condition, all parts of the vagina are soft and yielding to the finger, and pressure at any point will be borne without pain. Any deviation from this condition is an evidence of a pathological change. In the majority of cases which present themselves for treatment, the roof of the pelvis will be found to be tender to the touch, and this tenderness will be especially marked along the tract of the broad ligaments. The amount of tenderness may vary in degree from a slight pain when firm pressure is made up to such an extreme of sensitiveness that the patient will scream when the finger is introduced into the vagina. In addition to this tenderness it will usually be found that the whole or a part of the space surrounding the cervix is filled with a hard, unyielding deposit, which has been aptly likened to a board in the sensation which it communicates to the finger. This deposit holds the cervix firmly fixed in one position, and in a greater or less degree deprives the womb of its normal mobility. Such a deposit can not exist unless inflammation has been present. The combination of this boardlike hardness, with a greater or less degree of tenderness, constitutes evidence of the existence of chronic pelvic cellulitis. Whether this condition is one of true inflammation of the cellular tissue, it would be out of place to discuss here. It is sufficient to know that the condition is easily recognizable clinically, and while it exists the use of the pessary is contraindicated. The reasons for this contraindication are, first, because as a rule the pressure of a

pessary under such circumstances can not be comfortably endured by the patient; second, because the unnatural immobility of the womb prevents its restoration to the normal elevation, in which alone the pessary can be of benefit; third, because experience has shown that the pressure of a pessary under such circumstances is almost certain to convert the chronic cellulitis into an acute attack. Before a pessary can be applied without danger, every vestige of tenderness and hardness must be removed. The persevering use of copious vaginal injections of hot water, painting the whole surface of the cervix and vagina every three or four days with compound tincture of iodine, and the insertion daily into the vagina of a tampon of cotton saturated with glycerine, are the means which will be found best adapted to the accomplishment of this result. In some cases it will be necessary to employ these measures longer than in others, but if the perseverance of physician and patient be equal to the emergency, success will ultimately crown their efforts. When this point is reached, and not until then, may the question of inserting a pessary be safely considered.

There are certain precautions to be observed in the employment of pessaries, without which their use can not be free from danger. A pessary should never be allowed to remain in the vagina after it becomes in the least degree painful. The pain in such cases is nature's danger signal, which can not be safely disregarded. The patient must, in all cases, be instructed to have the pessary removed as soon as she feels any discomfort from it; or better still, she should be taught to remove it herself, and thus prevent the dangerous delay which might be unavoidable if she were obliged to resort to the physician. I never allow a patient to leave my office with a pessary in her vagina without first having seen her remove it unaided. In no other way can I feel assured that she is safe in wearing it. My instructions always are, "As soon as you feel any pain, remove the pessary and send for me at once." When sent for under such circumstances, I direct the patient to go to bed, and to use copious vaginal injections of hot water every two hours until all pain and tenderness have disappeared. I am satisfied that by this prompt treatment I have prevented attacks of acute pelvic cellulitis.

It is the duty of the physician to see and examine with the speculum, at least once a month, every patient wearing a pessary. Undue pressure upon the vaginal walls has been

known to proceed to the extent of producing severe ulceration without sufficient pain to attract the attention of the wearer, and pessaries have been found imbedded in the vaginal walls, which had been inserted a score or more of years before and entirely forgotten. Neither of these results would be possible if the pessary were removed at each recurrence of the menses and a vaginal examination made before it was reintroduced.

During the wearing of a pessary a copious vaginal injection of hot water should be used at least one a day. If this be not done, the pessary, no matter of what material it may be composed, is liable to become more or less encrusted with salts deposited from the vaginal and uterine secretions. Such encrustations are nearly always found upon pessaries which have remained in the vagina for a considerable length of time. The pessary is rendered rough and irritating by their presence, and is hence much more liable to produce injury by friction and pressure. By the use of the daily injection such concretions are removed, and their accumulation is rendered impossible. Moreover, the hot injections obviate any tendency to engorgement of the pelvic blood vessels, and thus operate as a prophylactic against inflammation.

There are two classes of cases in which mechanical support for the womb may be properly resorted to, viz.:

1. Those in which the displacement of the womb is due to a remediable cause, and the mechanical support is a temporary expedient for relieving unpleasant symptoms during the time required for the removal of that cause.
2. Those in which the cause can not be ascertained, or being ascertained, can not be successfully treated.

This classification is simply a confession of the imperfection of the science of gynecology, and as that science progresses, the number of cases in the second class will gradually be reduced to a minimum.

In this classification it will be observed that no place is provided for cases in which mechanical support is supposed to act as a curative agent. This omission is intentional, for while theoretically such cases are possible, yet in practice I believe them to be extremely rare. I have yet to see the first case of uncomplicated displacement of the uterus which required only retention in its proper position to effect a cure. If a perfectly healthy uterus be taken from a dead body and held by the cervix between the thumb and finger, and pressure be applied to the fundus, either vertically or laterally,



it will be found very difficult to produce a flexion of the organ. It is only when some portion of its tissues has undergone a pathological change that a flexion will occur. So again, to speak of an uncomplicated version of the womb would be to imply an effect without a cause. Nature has made ample provision for the support of the womb, and it is only when the ligaments are pathologically stretched, contracted or weakened, or the normal relations of the womb to neighboring parts are destroyed, that a version can occur. Hence, in this classification no place is left for uncomplicated displacements.

In the first class of cases the pessary can not be relied upon as a curative measure. I long ago adopted the views recently expressed by Mundé, when he says, "Pessaries, even the latest and most efficient, that of Gehrung, do not act as curative means; they are merely retentive agents."\* It is for the sake of temporary relief that a pessary is applied in those cases in which treatment can be directed toward removing the cause of the displacement. Such being the case, the desideratum in the pessary is obviously not a permanent adaptability to the condition of the vagina and uterus. As the result of treatment in such cases, the condition of the pelvic viscera is constantly undergoing a change, if progress be made toward a cure. Consequently, the pessary which is best adapted for use to-day may become entirely unfit for use to-morrow or next week. The change from day to day will be very slight, and yet, slight as it is, it must be met by a corresponding change in the pessary employed. There is constant danger of doing the patient harm by failing to make the proper adjustment, and thus in a few hours may be lost all the ground which has been gained in a month. The pessaries of hard rubber, block tin, glass, celluloid, etc., which are commonly used, do not meet the indications in these cases for the following reasons:

1. In the majority of cases which apply for treatment, there is inflammation in the pelvic cellular tissue. For reasons already explained, it is not safe to insert a pessary where inflammation exists. Yet, it is frequently necessary in such a case to support the womb on account of the pain produced by its traction upon the ligaments or its pressure upon neighboring organs. Mechanical support is indicated, yet no pessary meets the indication.

---

\*Minor Surgical Gynecology. New York, 1885, p. 209.



2. Even though there may be no inflammation present, it will rarely fail to be the case that hardness in the roof of the vagina will show that inflammation has previously existed, which needs only a very slight irritation to kindle it anew. To avoid this danger, it is necessary to wait until this symptom has entirely subsided before introducing a pessary. Meanwhile the patient remains unrelieved of her most troublesome symptoms.

3. Even with the best of skill and attention, in a certain proportion of cases ulceration in the vaginal walls will result from the use of a pessary. In no case is it justifiable to expose a patient to this risk unless there is a certainty of obtaining a degree of benefit which will more than counter-balance it. It may well be questioned whether the temporary relief obtainable is a sufficient inducement for undertaking this risk.

4. It is impossible to adjust a pessary with the accuracy necessary to meet the requirements of a case in which the conditions are constantly changing in the process of cure, and in which the tissues are in so sensitive and inflammable a state that a slight failure in adaptation is liable to do serious mischief.

Is it necessary, then, to abandon the use of the pessary in cases where mechanical support is a means and not an end? Can any substitute be found which will neither excite inflammation nor aggravate it when already existing? In answering these questions in the affirmative, and thereby condemning the employment of pessaries in such cases, I am aware that I shall present views differing from those of a large portion of the profession. But I believe that my views are based upon correct principles, and will stand the test of clinical experiment. I have for years used a substitute which fulfills every indication, while it is not open to the objections which may be urged against the use of pessaries. The substitute referred to is the tampon of cotton. In this appliance is found a means of support for the uterus which, if properly used, can produce neither inflammation, ulceration nor pain. It may be placed in a vagina whose roof is as hard as a board and as tender as a boil, and no harm will follow. It may distend the vagina to its utmost limit, and yet the integrity of the mucous membrane will remain unimpaired. If inserted with an ordinary degree of discretion and judgment, it will produce no pain, but will communicate a comfortable feeling of support to the pelvic organs which very few pes-

saries can give. In skillful hands it will fulfill every requirement for the support of the uterus, while in the hands of the unskillful and inexperienced it is incapable of doing harm.

To properly apply a tampon for the support of the uterus, it is necessary first to ascertain the position in the pelvis at which the womb is most free from pain. This may be done in the manner already pointed out. The patient then having been placed in Sims' position, and Sims' speculum having been introduced, a pledget of cotton saturated with glycerine is placed in the posterior *cul de sac*, another in the anterior fornix, and a third and fourth on either side. The size of these pledgets must be such as to fill the space between the cervix and the vaginal wall on all sides with a moderate degree of distention. The cervix may thus be held fixed with a tolerable degree of firmness in its normal axis. A larger pledget of cotton, also wet with glycerine, is placed immediately below the cervix so that it will lie between it and the vaginal promontory. The size of this pledget should be such that when in position it will raise the womb to the point where it is most free from pain and, resting upon the vaginal promontory, will form a platform of support for the cervix. A certain amount of experience is necessary in order to insert the cotton in such a manner that it will remain where it is placed and hold the womb in the desired position. If the cotton be packed too firmly around the cervix, the natural mobility of the womb will be abolished and the jar of every motion will be felt in the pelvis by the patient. On the other hand, if too loosely applied, it will be found in a few hours to have fallen down into the lower part of the vagina, and all its usefulness will be gone. A certain amount of experience will enable the operator to avoid these two extremes.

A tampon of cotton should never be allowed to remain in the vagina for more than twenty-four hours. In the majority of cases which require its use, the hot vaginal injection is also indicated by the presence of inflammation. If the injection is used with the tampon in the vagina, it is robbed of all its beneficial effect, as it fails to come in contact with the cervix and the surrounding parts of the vagina. It is, therefore, necessary that the cotton should be removed before taking the injection. In order to carry out this plan, it is best that the injection should be given at the physician's office, or that the patient should be seen at her home. If

she remove the cotton, take the injection, and then walk or ride to the physician's office with the womb unsupported, the good effects of the tampon will be lost.

The difference in the manner in which the cotton must be packed to adapt it to the different varieties of displacement is not as great as might be supposed. Yet it is only by an appreciation of these slight differences that the maximum of benefit from this mode of treatment can be obtained. The cardinal point involved is to so graduate the pressure of the cotton as to bring the cervix as nearly as possible into its normal axis, so that the counter-pressure from the portion of the tampon resting upon the vaginal promontory will be exerted in the direction of that axis. If the above-described manner in which the evil effects of displacement are produced be borne in mind, it will be readily understood how a slight degree of elevation in the pelvis will relieve those symptoms. This is the only result which can be hoped for from mechanical treatment. Whether the condition be that of flexion or of version, whether backward or forward, the elevation of the womb in the pelvis will give the temporary relief which must be recognized as the ultimatum of mechanical treatment. Having accomplished this, the proper means must be sought for the removal of the cause of the displacement.

The second class of cases, those in which the cause of displacement can not be recognized, or being recognized can not be cured, furnishes, therefore, the proper field for the employment of pessaries. These cases are the *opprobria medicorum* of gynecology. Their existence is a constant reminder of the imperfection of our art, and their treatment, even with the methods which experience has shown to be best adapted to such cases, is far from satisfactory in its results. Procidentia of long standing, in which all the supports of the uterus have been completely relaxed for many years, displacement due to interstitial or subperitoneal fibroids, or other incurable tumors in the pelvis, are illustrations of this class. In such cases the adaptation of mechanical means for the support of the womb usually constitutes the whole treatment, since it is impossible to remove the cause. It is important, however, that before the case should be relegated to this class of incurables, every means should be employed which offers any hope of effecting a cure. The operations of elytrorrhaphy, episiorrhaphy, colporrhaphy and hysterectomy have been carried to so high a degree of success, and improved methods of operating have so far enhanced the bene-

fits to be derived from them, that many cases, which a few years ago were regarded as amenable only to palliative remedies, are now treated with a degree of success which is eminently satisfactory. These radical operations are among the most brilliant achievements of modern surgery, and no physician has performed his full duty to his patient who has not given her the opportunity of enjoying their benefits. When they fail, as unfortunately they sometimes will, there still remains as a further resource the use of the pessary to palliate the evils which can not be cured. I do not propose to discuss the use of the pessaries in this class of cases, as little, if any, difference of opinion exists in regard to the propriety or the methods of their use. Unsatisfactory as are the results obtained, they are the best means available for the treatment of this class of cases, and as such should receive their due share of attention. It is probable that the further development of the science of gynecology will gradually lessen the number of such cases, and this prospective benefit should furnish an additional incentive to their thorough and persevering study.

---

### On the Treatment of Furuncles.

---

THE *Boston Medical and Surgical Journal* (*Medical Age*) writes :

Gingeot has contributed to the *Bulletin Général de Thérapeutique* (t cviii.) a valuable series of articles on the treatment of boils and carbuncles, of which the following is a summary: Brodie, in his lectures on pathology, published in 1846, advanced the view that the furuncle was a species of eruption analogous to smallpox, and a local expression of a poison circulating in the blood. Alphonse Guérin, in the article Anthrax in "Jaccoud's Dictionary" (1865), teaches that furunculosis is a septicemia, and assigns to it an intermediate position between the general affections which localize themselves, and those which, becoming generalized, result from a lesion primarily local.

The contagiousness of furunculosis was established by Startin in 1866. He proved (1) the auto-inoculation of the contagium by scratching; (2) the transmission from individual to individual by contact (as by occupation of the same bed); (3) the development of boils on the hands of



surgeons and dressers consecutively to their being wounded with a bistoury which had been used in opening a furuncle. Lannelongue inoculates patients with matter from boils, producing at the point of puncture furunculous eruptions.

It is not only proved that boils and carbuncles can be transmitted from man to man by contagion, but the active principle of the contagion, according to Gingeot, has been discovered. For this discovery we are indebted to Pasteur, who, on applying to the furunculous affection the same means of study as had been applied by him to the investigation of the pathogeny of splenic fever, fowl cholera, and other virulent diseases, "has been able to demonstrate that every furuncle contains certain microscopic parasites, and that it is to these that there are due the local inflammation and the pus formation." This microbe is called by Pasteur the *torula pyogenica*; this mycologist, moreover, identifies this bacterium with that of abscesses of the soft parts, of osteomyelitis, and of puerperal fever; certain it is, however, that the product of cultures of furunculous origin has never given rise, by inoculation in animals, to anything but simple abscesses, never to furuncles. Gingeot explains this fact by referring to the peculiarity of the tissue, namely, the glandular apparatus of the skin (and especially the pilo-sebaceous glands), where the furuncle has its seat; the inoculation of the microbe would have a different result according as such inoculation were made into a follicle, or into the subcutaneous cellular tissue. M. Lowenberg has repeated Pasteur's cultures and inoculation experiments, and has confirmed them; he has also shown the part played by hairs in the collection of germs. The view which he adopts, and which Gingeot indorses, makes furunculosis a parasitic disease resembling scabies, and the old humoral notions respecting the etiology of boils and carbuncles are repudiated. It is, however, certain that furunculosis is attached by many bonds of union to the other virulent affections. A certain predisposition of constitution is necessary; the *torula* does not thrive unless it finds a favorable medium. This predisposition is found in certain debilitated states of the economy from overwork, alcoholism, diabetes, lithemia, etc., in which there is such modification of the secretions of the skin as renders the piliferous and sebaceous glands a suitable habitat for the *torula pyogenica*.

The indications of treatment are (1), if possible, to cause the furuncles to abort; (2) this indication being impossible

of fulfillment, to moderate the amount of suppuration; (3) to antagonize the constitutional condition which favors furunculous productions.

There are two principles laid down as the fruit of large experience: first, never to open early; second, seldom or never to open, even if suppuration has taken place, but to leave the boil or carbuncle to nature. Since the furuncle is a parasitic affection, the essence of the treatment ought to consist in destruction of the parasite. One of the first precepts is to apply no poultices. Even when put on cold, the poultice has no power to stay the development of the furuncle, and when warm, it can only favor such development, as heat and moisture promote the vital activity of the lower organisms; moreover, the organic substances of which the poultice is made furnish a contingent of food to the parasite. Even when the boil has gone on to suppuration, the poultice is rather injurious than otherwise, aiding the penetration of new follicles by the microbe, by spreading the pus over the skin and keeping it in contact with the glandular orifices dilated by the heat.

One of the external remedies likely to be most successful in the abortive treatment of furuncle, and which Gingeot highly recommends, is the tincture of camphor. Both the alcohol and camphor in this preparation are excellent parasitocides. The camphorated spirit is applied to the part by means of a compress, and allowed to remain in contact with the skin for a few minutes. Thus treated, boils, if taken at the commencement, are frequently made to abort. The application should be made three or four times a day.

Another good agent for fulfilling the same indications is tincture of iodine, which should be painted freely several times a day over the furuncle and a little beyond. If applied till epidermic desquamation takes place, the iodine tincture does no harm, and if it does not always prevent, it certainly moderates suppuration, thus fulfilling the second indication and better than (perhaps) any other remedy. Gingeot believes that the iodine does good by its superlative parasiticide action; "the parasites can not escape contact with the liquid, which is introduced by capillarity into the glands, and by endosmosis into the acuminate vesicles of the top of the furuncle."

The same treatment is applicable in the early stage of carbuncle, and will often arrest its development; if, however, the progress of the carbuncle can not be stayed, a strong

solution of carbolic acid (equal parts of the strong acid and glycerin) must be brought in contact with the diseased tissue, as Dr. Eade, of London, recommends.

The central cord or stem must be destroyed; this may be done by freely applying the carbolic acid through any opening which may exist in the center of the swelling, or a sufficient opening may be made with acid nitrate of mercury.

When the furuncle is opened and discharging, the usefulness of tincture of iodine is ended. Then there is nothing better than boric acid applied in the form of fine powder, which is freely dusted over the boils, or of the saturated aqueous or alcoholic solution which is kept constantly in contact with the diseased parts by means of compresses soaked in the liquid.

As for internal medication, Gingeot has nothing better to suggest than the recommendation to follow out the line of treatment several years ago indicated by Dr. Sidney Ringer, and indorsed by Dr. Duncan Bulkley. This consists "in the administration from the first of sulphide of calcium in small doses (one-sixth or one-fourth grain) every two hours. It is worthy of note that in the excellent paper which Dr. Bulkley read at this meeting, he coincides very nearly with the line of treatment above briefly summarized.

---

### Albuminuria Treated by Fuchsine.

---

MR. A. T. BARNARD reports the following case, which came under the care of Mr. W. Mitchell Roocroft. Wm. R., aged forty, was admitted to the Royal Albert Edward Infirmary, Wigan, on May 8, 1885. There was extreme anasarca of the head, face and legs and ascites; the tongue was coated, the breath very foul, and the skin hot and dry. On inquiry, he said he had been working for some time in water in the pit. He complained of pain in the lumbar region. The urine, on examination, was of a pale straw color, and acid reaction, of specific gravity 1015; there was a slight deposit, and it became almost solid with albumen on boiling; under the microscope, granular casts were found. The quantity of urine passed was three to four ounces on the day after admission. The following treatment was adopted: a vapor-bath was to be taken three times a week, and a drachm of compound jalap powder every second morning. He was ordered: *R* Tinct. digitalis *mx*; tinct. ferri perchloridi *mx*;

aq. chloroformi ad ʒj; to be taken three times a day. His diet was ordered to consist solely of skimmed milk, eight pints daily.

This treatment was continued until July 16th, with the exception that the jalap powder was discontinued on June 15th. During this period, the ascites and anasarca diminished, the amount of urine passed daily varied between sixty and seventy ounces, the amount of albumen also varied between one-half and one-third.

As he did not seem to improve under this treatment, a grain of fuchsine (in the form of pill made up with compound tragacanth powder and extract of gentian) was prescribed to be taken three times a day, and he was allowed ordinary diet.

On July 20th, the dose of the drug was increased to two grains three times a day, the amount of albumen when the fuchsine was commenced being one-third, the urine containing crystals of uric acid and waxy casts. The urine (owing to the drug) now assumed a pinky-red color, and the fæces were also colored.

In ten days, the albumen was reduced to one-sixth, and on August 13th, there was a mere trace, which continued until he was discharged (at his own wish), and made an outpatient, still continuing the fuchsine, which was now reduced to three grains in the day.

His urine was examined every week or ten days, and on the last three occasions there was a total absence of albumen, and nothing microscopically, the fuchsine being reduced to one grain in the day.

On September 30th, the patient was discharged, and intended to recommence work.— *British Medical Journal*.

---

### Ten Cases of Pregnancy and Labor Complicated with Fibroids, with Remarks.

---

IN the *Medical Chronicle* we find the following abstract of a paper read by Dr. Chadwick at the annual meeting of the Massachusetts Medical Society. These cases are carefully reported, and well illustrate some of the difficulties of diagnosis and treatment which beset the complication of fibroid tumor with pregnancy. Considering, too, the dangers to life which frequently arise from the occurrence of abortion and profuse



hemorrhage, from operative interference necessary to effect delivery, or from septicemia following disintegration of the tumor, the results obtained by Dr. Chadwick are highly interesting, both as regards the mother and child. These results are thus tabulated :

Miscarriage . . . . .	one case.
Recovery of mother . . . . .	seven cases.
Death of mother . . . . .	two cases.
Living child . . . . .	seven cases.
Stillborn child . . . . .	two cases.

With regard to miscarriage Lefour is quoted as having shown that this does not occur so frequently as might be expected.

The prognosis for the mother indicated by Dr. Chadwick's cases is much better than that which is warranted by the accepted statistics; but he is of the opinion that the rates of mortality are higher than they would be were all cases to be reported, it being manifest that those cases presenting no serious difficulty are often thought unworthy of publication. There is, however, a special feature in Dr. Chadwick's cases, which he alludes to as having had an important influence upon the results, namely, the location of the tumor. Thus, in six cases the tumors appeared to be subperitoneal, and in all of these, except one, in which slight septic infection occurred, the period of labor and child-bed was passed through without complication; whereas, in three cases in which the tumors were submucous in position, two of the mothers died, and the third recovered after a severe attack of septic infection. Dr. Chadwick observes that the location of the tumor in the lower segment of the uterus so far as to interfere with the birth of the child, introduces the most serious element of danger during the delivery. Should this condition exist, he suggests that a vigorous attempt should be made under ether to elevate the tumor from out the pelvis early in pregnancy, and this failing, that the induction of abortion, or of premature labor, would be the safest course to pursue.

In one case a large tumor presented at the external os immediately after delivery. As septic infection, with fatal result, occurred when no attempt at enucleation had been made, Dr. Chadwick considers it may fairly be doubted whether an operation would not have determined a different

issue. The post-mortem condition, however, seemed to justify the previous opinion that any operation for removal of the tumor would have been very difficult, attended with much hemorrhage, and, if successful, would have left an immense wound for the absorption of septic matter.

Dr. Chadwick points out that, in his cases, the special complications induced by the presence of a tumor in labor illustrate the frequency of inertia of the uterus and the liability to septic poisoning in childbed.

With regard to the children, these cases show a much lower mortality than appears in the statistics quoted of Lefour and Suesserott; and in this connection, allusion is made to the nature of the presentations, which, in Dr. Chadwick's cases, were seven times that of the head, and twice transverse presentations. In each of the latter cases the tumor partially filled the pelvis, so that a transverse position was almost a necessary occurrence.

Regarding the effect of pregnancy and labor upon the tumors, Dr. Chadwick observed that, as usual, the tumors increased enormously in size with the advance of pregnancy. After labor, however, he found that, in six of the eight patients who survived, no trace of the tumors could be found upon examination made after an interval varying from two weeks to twelve months respectively. In case seven, in which miscarriage occurred at three and a half months, one tumor was entirely absorbed and the other was unaltered in size. In case ten, the tumor was sessile, and only as large as a goose egg, but appears not to have been absorbed.

From these cases Dr. Chadwick makes the following deductions: As aids to diagnosis, the following points should have great weight: (1) An area of percussion dullness beyond the limits of the tumor or tumors. (2) Unduly rapid growth of the fibroid. (3) Bluish discoloration of the vaginal entrance.

As to treatment.—(4) That intrauterine disinfectant douches should be administered throughout the puerperal period in all cases, even before the supervention of symptoms.

As to prognosis.—(5) The fibroids are, as a rule, absorbed during involution of the uterus or soon after.—*Weekly Med. Review.*

## Operation for Imperforate Hymen.

---

THE best method of operating in vaginal atresia, whether from imperforate hymen, or from other cause, is still unsettled, particularly as to the immediate or the gradual evacuation of accumulated menstrual fluid, and as to washing out the uterus if rapid evacuation be used. As remarked by Barnes, a few years ago, in a discussion upon the subject before the London Obstetrical Society, fatal cases do occur now and then, no matter which plan may be pursued. It is probable, however, since antiseptics have taken so important a place in therapeutics, and are so generally used in the operation referred to, that its mortality will be lessened. Nevertheless, danger may come from the antiseptic itself, as suggested by the history of a case recently reported to the *Société de Chirurgie* of Paris, and which we find published in the *Journal d'Accouchements*, of December 30th.

A girl, twenty years of age, had for a year suffered from severe abdominal pains; she had never menstruated, and emmenagogues were given her without effect. Upon abdominal examination a tumor was found reaching nearly an inch above the umbilicus; at the vulva a violet-colored tumor, formed by the thinned and distended hymen, was found. The patient was anæsthetized, and a small antero-posterior incision was made into the imperforate hymen; this incision was afterward increased in size, and a transverse one made; gentle compression through cotton wadding upon the abdomen was made, and the liquid evacuated in three-quarters of an hour. A tube was placed in the vagina, and a two-thousandth solution of corrosive chloride used to wash out the vagina; these corrosive sublimate injections were continued until the fifth day, when a slight mercurial stomatitis being manifested, they were substituted by a solution of carbolic acid. The patient promptly recovered.

M. Berger, the reporter, recognizes the dangers that may occur from rapid evacuation in certain cases of menstrual retention, but these cases can be known in advance by the fact that the distended tubes are discovered by abdominal examination, presenting fluctuating tumors outside of the median line.

The fact that this patient suffered from mercurial poisoning, though this was only slight, proves that the normal vaginal mucous membrane has greater power of absorption

than has usually been attributed to it, and suggests the importance of using weaker solutions of the corrosive chloride, especially if intrauterine as well as vaginal injections are made.

In the discussion of the subject by the Society, M. Lucas Championnière condemned the use of carbolic acid solution injections, fearing absorption, because of the solution coming in contact with such an extensive surface, and preferred iodoform as an antiseptic. Gillette suggested that to prevent reunion of the lips of the incision, the latter should be made by the thermo cautery. Of course, when this is done, immediate, rather than gradual, evacuation of the menstrual fluid necessarily occurs.

It is questionable whether anæsthesia is advisable, when, as in Berger's case, a tense, thin hymeneal membrane is to be incised or punctured, for the operation can not be painful. Further, the history of the case, prior to the operation, suggests the folly of giving emmenagogues in a girl who had so long passed the age, and had the development of puberty, without first ascertaining whether there was not a failure in menstrual excretion, rather than of secretion, and the case, therefore, one in which such medicines could accomplish no good, and might do much harm.—*Phil. Med. News.*

---

### Medical Society of London.

---

MONDAY, November 23, 1885; W. M. Ord, M.D., F.R.C.P., President, in the Chair.

*Sarcoma after Injury.*—A paper on the development of sarcoma shortly after injury, founded on three cases recently observed, was read by Mr. A. Pearce Gould. The first was that of a girl aged 16, who, three months after she had struck her forearm, noticed a swelling of the upper end of a radius, which enlarged rapidly under observation till it involved the upper third of the bone. Puncture of a fluctuating area with an aspirating needle resulted in the withdrawal of some bloody fluid. The patient made a good recovery. The tumor was found to consist in great part of a large blood-cyst. On microscopic examination its structure was seen to be that of a myeloid sarcoma. The second case occurred in a woman aged 26, who, three months previously, had struck her thigh. Two months later a swelling was apparent, and steadily increased, so that, when first



seen, the whole bone was involved, and the tumor had attained a large size. The tumor was situated on the outer side of the bone, but, on section, was seen to extend into the medullary canal. It contained several blood-cysts, and was part ossified. The limb was amputated by a modification of Mr. Furneaux Jordan's method. Soon after amputation of the thigh, recurrence of the growth occurred in the groin. The secondary tumor was excised, but the disease had recurred in the stump. The third patient was a man aged 70, who, on October 26, 1884, struck his arm and elbow. He was admitted into Hackney Infirmary and treated for contusion. On November 18 he was discharged, but was readmitted in February on account of pain and swelling of the arm. The humerus was greatly enlarged and broken. It was put up in splints; but the swelling rapidly increased, and the limb was amputated. Mr. Gould quoted a considerable number of cases where sarcoma appeared soon after injury, recorded by various writers. It was important, he said, to class separately those cases in which growths followed, not after repeated slight injuries (irritation), but a single injury. He confined his remarks to the first class of cases, and observed, in the first place, that the relation between the injury and the growth of such tumors did not account for the fact that such patients had previously received many injuries—perhaps in the very same part—without the development of a tumor. The cases occurred most frequently between twenty and forty years of age, an age when injury was most frequent, and in those bones which were most exposed to injury.

Mr. Harrison Cripps referred to the three cases already recorded, where sarcomatous growth followed directly on injury; in all the cases there was bruising, and he thought that bruising of the tissues was an invariable antecedent of the development of tumor in these cases. He thought that pyæmia afforded an analogy to these circumstances; the most striking clinical difference was the greater length of these cases of so-called traumatic malignancy; the most striking pathological difference was that, in pyæmia, the new cells being rapidly formed broke down, whereas in sarcoma, the newly formed material did not break down, but was more or less organized. He suggested that, in these cases of malignant traumatic sarcoma, an infective organism might play some part in the origin and dissemination of the disease.

Mr. Davies-Colley related a case of a boy, aged 13, who

sustained a fracture of the thigh; two months later a swelling appeared, and the union of the bone was found to be imperfect. As the swelling was fluctuating, it was incised; bleeding continued for some time; the limb amputated, but the patient succumbed. The amount of new growth was very small in the bone and the muscles around, but there were secondary growths in the lungs and kidneys. He praised Mr. Furneaux Jordan's method of amputation.

Mr. George Lawson said that injury was a frequent antecedent of new growth, and he made no doubt that sarcoma, scirrhus and epithelioma might follow directly on injury.

Mr. Barwell said he believed that he was the first to apply the term traumatic malignancy to this class of cases. He had seen six cases in which there was an extreme tendency to keloid growth, in connection with acne punctata, and quoted one in which one of these small keloid tumors enlarged rapidly, and was found on removal to be sarcoma. He adopted the theory of existence of tumor diathesis, or predisposition to the formation of new growths. He thought Mr. Furneaux Jordan's method of amputation gave good results.

Mr. R. W. Parker considered that Mr. Furneaux Jordan's method of amputation was very advantageous in children. He thought that, in the causation of these cases of sarcoma after injury, the existence of a predisposition must be admitted. He had frequently observed the development of sarcoma in connection with blood clot, and suggested that its growth might have its origin in the leucocytes of the blood-clot.

Mr. Royes Bell dwelt on the difficulty of diagnosis. He quoted several cases where mistakes had been made. Sir Joseph Lister's method of amputation by a long oval incision was a very satisfactory operation, though rather tedious.

Mr. J. Bland Sutton related a case where sarcoma of the tibia occurred ten years after an injury inflicted by a spent cannon-ball, and observed that it was only in cases where there was some special circumstances serving to fix the injury in mind, that the connection could be ascertained. Sarcoma was very frequent in animals, from fish to men; the situation in which the growth occurred in various species varied with the species, but always occupied a situation which, in that species, was peculiarly liable to injury. The clot formed after contusion might organize perfectly or im-

perfectly, or retain ill-formed tissues to the end, or it might act as what Cohnheim called a tumor-germ, and might be the starting point of a generalization.

Mr. Gould, in reply, said that his method of amputation differed from Mr. Furneaux Jordan's, in that he made a circular incision as for amputation through the upper third of the thigh, and tied the vessels; then he made an incision upward to the trochanter, and enucleated the head of the bone.—*Louisville Medical Herald*.

---

### Hypodermic Medication.

---

FROM Dr. Talfourd Jones' address before the British Medical Association, we learn that Dr. Alexander Wood, of Edinburgh, in 1855 published an account of his method of introducing liquor morphia into the system by subcutaneous injection, which was the first recommendation of the hypodermic method. It is an important point to know that the cumulative action of drugs is less when thus given than by any other way; elimination commences sooner and is sooner completed. Dr. Jones advises us to look carefully into the graduations on the piston-rod of the syringe, for he has found them more often wrong than right. While recommending the tablets for hypodermic use, Dr. J. recommends us to make our own solutions, *when we are ready to use them*; the majority of solutions (especially weak ones) do not keep well. The acetate of morphia he prefers to any other preparation of this salt. A *stock* bottle may be made by half filling with water (not distilled), a bottle that holds *exactly* one ounce; put in 40 grains of acetate of morphia and *exactly* four minims of acetic acid; shake and fill the bottle with water. This solution will keep (if corked and kept in the dark) for six months. It should only be opened to fill the case bottle. It may become a little darker, but this is immaterial. A most important question arises in connection with the dose; as a general rule, we may say that, other things being equal, the dose of a drug must be apportioned according to the body weight of the patient. The hypodermic use of morphia should be avoided, if at all possible, with children, and when demanded, after having made due allowance for body weight, we should give no more than half the otherwise proportional dose. The initial dose should be from  $\frac{1}{24}$  to  $\frac{1}{4}$  of a grain. A solution of

atropine will keep a little better if chloroform water or camphor water is used instead of plain water.—*Med and Surg. Reporter.*

---

## New York Neurological Society.

---

### A CASE OF SOFTENING OF THE CORPORA STRIATA, WITH SPECIMENS.

DR. J. C. SHAW related the case, that of a gentleman thirty-eight years of age, whom he saw for the first time in July, 1883, in consultation with Dr. Fuller. The patient was a large man, healthy in appearance. About a month previously he had an attack of hemiplegia on the right side, with very temporary loss of consciousness. When Dr. Shaw saw him the arm had entirely recovered, but there was still dragging of the leg. The tendon reflex of that side was exaggerated. There had been no premonitory symptoms except that for six months previous the patient had at times been exceedingly irritable. He denied having had headache, or syphilis, and claimed that if it were not for the paralysis of the leg he would be in perfect health. At this time Dr. Shaw was in some doubt regarding the nature of the lesion; the diagnosis seemed to lie between cerebral hemorrhage and a possible meningo-encephalitis. Against cerebral hemorrhage were his age and the dragging of the foot, the toe scraping the floor; and about the only point which favored meningo-encephalitis was mental irritability. The patient would take no medicine except cathartics.

Dr. Shaw saw him again in consultation in June, 1884. He had suddenly become completely hemiplegic upon the left side; was unconscious and had stertorous respiration; he passed his urine and feces in bed. Recovery gradually took place from the unconscious state; paralysis remained on the left side. Trophic troubles began in the joints of the paralyzed arm, accompanied with pain. Patient would cry when spoken to, and could give no history of himself. At this attack Dr. Shaw concluded that there was cerebral arteritis, probably syphilitic and thrombosis. The patient accused his wife of infidelity, became very noisy at night, and was sent to an institution, where he died in October, 1884.

At the autopsy the viscera appeared to the naked eye to be normal. Nothing special was observed in the meninges. The ventricles were distended with fluid, and contained granu-



lations. The corpora striata were softened, due to arteritis of both middle cerebral arteries and their branches. There was secondary degeneration in the cord on both sides, and the case seemed to illustrate the unequalness of the decussating fibres on the two sides, the degeneration on the right side in this instance being much more marked than on the left.

Dr. Shaw said the points of interest to him were, that both arteries should have been involved in the arteritis, causing softening of the corpora striata on both sides. That the patient saw dogs, etc., at night, which might have been a form of visual hallucination. Lastly, the accusation of his wife of unfaithfulness, a symptom which is frequently met in chronic alcoholics, but rarely in other conditions.

Dr. E. C. Seguin asked if there was not probably involvement of at least one internal capsule.

Dr. Shaw replied that there was, and that the case probably was not one of limited involvement of the corpora striata.

Dr. Seguin thought a point of interest was the fact that granulations were found in the ventricles, for this is a rare pathological condition except in general paralysis. It is sometimes found in other conditions, as chronic mania.

Dr. Shaw said that the granulations in this case was marked. He had seen granulations on the floor of the ventricles in a variety of conditions in the chronic insane and others. Sections of the cerebral cortex did not show the lesions characteristic of general paralysis. Dr. Seguin may have noticed that the patient was unusually satisfied with his condition, almost amounting to a delirium of satisfaction.

---

### A New Method for the Removal of Foreign Bodies from the Nose.

---

DR. D. BRYSON DELAVAN, of New York, sends us the following: "The presence of a foreign body in the nasal cavity is usually attended with marked swelling of the neighboring mucous membrane. Its extraction by any of the means in common use is accompanied with pain, often of great severity, and is often followed by copious hemorrhage. The swelling offers, of course, a serious obstacle to the extrusion of a hard body, while one which has increased in size from the imbibition of water becomes all the more firmly impacted.

Hence, in attempting the removal of the body, more or less laceration of the membrane is likely to occur. The pain, with difficulty tolerated by an adult, causes a child to become in every instance unmanageable, so that an anæsthetic is required. The hemorrhage is usually controllable after the lapse of a few minutes, but may, meanwhile, cause considerable annoyance. From our knowledge of the physiological action of cocaine upon the nasal mucous membrane, it is evident that, by its use in these cases, all of the above difficulties may be overcome; for applied to the nose, the mucous membrane becomes strongly retracted, the sensibility to pain lost, and the blood-vessels exsanguinated. Thus, the calibre of the fossa is greatly widened, the irritation and consequent resistance done away with, hemorrhage prevented, and the removal of the foreign body thereby greatly facilitated. To carry out the method, the occluded nostril should first be cleansed with a spray or gentle current of some lukewarm alkaline solution, after which a four per cent. solution of cocaine should be applied to the mucous membrane. When its effect has become complete, the extrusion of the body should be attempted by directing the patient to blow forcibly through the affected nostril. Failing in this, it should be drawn out by some suitable instrument. Should the patient be too restless to make this practicable, an anæsthetic may still be administered. In cases of invasion of the frontal sinus or antrum of Highmore by insects or larvæ, cocaine should be applied to the membrane before the administration of chloroform or ether, in order that the canals leading to these cavities may become as patent as possible, and thus the vapor of the anæsthetic be admitted very thoroughly to the intruder's presence. The insensitiveness of the membrane produced by the cocaine will, in these cases, certainly add to the comfort of the sufferer should it be necessary to inject, or still better, to spray the nose with chloroform."—*Medical Record*.

---

CHAPPED HANDS.—At a recent meeting of the Philadelphia County Medical Society, Dr. Carl Seiler called attention to the value of tincture of benzoin in the treatment of chapped hands and frosted feet. He has used it in a number of cases with much success. It is applied by simply painting it on the skin. The stocking may be prevented from sticking to the feet by rubbing some oil over the benzoin.—*Polyclinic*.

## Microscopy.

### Micro-Organisms.

Reported by A. H. Breckenfeld, Recording Secretary.

THE first meeting of the year, held by the San Francisco Microscopical Society, attracted a large and interested attendance last Wednesday evening. By subscription, donation and exchange, valuable additions were made to the library, cabinet and files, an especially noteworthy acquisition being the latest (1885) edition of Habirshaw's "Catalogue of the Diatomaceæ," presented by Charles W. Banks. Reports of proceedings were received from kindred societies at Liverpool, England, and Wellesley, Mass.

A slide of *bugula* (cellularia) *avicularia*, one of the marine polyzoa, was donated by Mr. Howard, and shown under hues of polarized light.

The subject appointed for discussion, "Culture Methods Used in the Study of Micro-organisms," was introduced by Dr. C. P. Bates. He stated that the absorbing interest attending the study of unicellular organisms during the past few years, especially of that group known by the generic term "Bacteria," and the variable conditions under which they require to be observed, had necessitated the use of numerous fluid and semi-fluid culture media. A brief description of some of these was given, together with the modes of preparation and preservation usually employed. The respective merits of fluid and of gelatinous media were alluded to, Dr. Bates being evidently inclined to follow Pasteur, in giving preference to the former. By means of apparatus constructed by himself, he demonstrated his method of sterilizing and preserving culture fluids. Various forms of "culture tubes" were shown, and also numerous other devices used in the study of the life history of bacteria and allied organisms. At the conclusion of the discourse, quite an animated discussion arose as to the respective merits of the "gelatine method" of culture—introduced by Koch—and that of Pasteur, who still employs fluid media in his investigations. The advantages claimed for Koch's method will be explained and practically demonstrated at a subsequent meeting by Dr. Ferrer, who has just returned from a sojourn among the principal laboratories of Europe.

Dr. Stallard showed specimens of tubercle bacillus in a section of lung structure, and also a handsome slide of waxy degeneration of the malpighian tufts in human kidney, and the meeting then adjourned.

---

MEASUREMENT OF RED BLOOD-CORPUSCLES.—In the *Chicago Legal News*, of July, 1885, Dr. Marshall D. Ewell, records some careful examinations of red corpuscles with a view to obtaining an average, more especially for medico-legal purposes.

An examination of the figures shows that the difference between the greatest and smallest averages of twenty-five corpuscles is .000028 or 1-35714 inch, a magnitude that may be easily measured by any person having the requisite skill and apparatus. The difference between the highest and lowest averages of fifty corpuscles is .000015 or 1-66666 inch, which approaches more nearly the limit of micrometric measurement, though probably not beyond it. The difference between the highest and lowest averages of seventy-five corpuscles is .000012 or 1-83333 inch, which approximates the limit of micrometric measurement. The difference between the highest and lowest averages of one hundred corpuscles is .000009 or 1-111111 inch, which is within the limits of personal and instrumental error, according to the highest living authority upon this subject, who writes, in substance, that it is easy to measure 1-50000 inch, but to be sure of a 1-100000 inch, is not possible.

The conclusion to be deduced from the above figures is obviously that, when a sufficient number of corpuscles are measured, there appears to be an average size which varies within very narrow limits, which may possibly be accounted for, or at least is consistent with personal and instrumental errors; for though he has carried out the figures to the sixth decimal place, he has not the presumption to declare that the results can be relied upon farther than the fifth place, and has carried out the figures to the sixth only to insure accuracy in the fifth so far as possible. Another conclusion is that, granting for the moment that it is possible to identify blood by measurements of the red corpuscles, of which he is by no means satisfied, it is reckless in the last degree, if not criminal, to express an opinion upon the measurement of less than one hundred corpuscles. To express an opinion upon the measurement of only ten corpuscles—as he is informed has



been done in this section within the last year or two—to take the most charitable view of the subject, betrays such culpable ignorance of a subject involving such momentous consequences as ought forever to invalidate the testimony of one who should swear so recklessly. In a case involving the issue of life and death it would be better to measure several hundred corpuscles.

An examination of the unabridged table of measurements, from which the above summary is tabulated, discloses the further fact that by selecting the corpuscles it would be possible for a dishonest observer to make the average much larger or smaller than that above given, without the possibility of detection; a fact, the bearing of which upon the value of expert testimony upon this subject is so obvious as to need no comment.

It will be seen that he has not attempted to draw any inference as to the cause of the larger average size of the corpuscles first measured. Whether it was or not due to the drugs exhibited during the beginning of this work, is an interesting subject of inquiry, which must be reserved for future examination.

---

## Gleanings.

---

OPIMUM HABIT IN THE NEGRO.—(Dr. J. D. Roberts in the *North Carolina Medical Journal*.) We can see some reason why the colored man is not as susceptible to the habit as the white. He has not the same delicate nervous organization, and does not demand the form of stimulant conveyed in opium—a grosser stimulant sufficing. The opium habit is contracted, in a majority of cases, from the physician's prescription being too long continued, either from carelessness or inattention on his part, and often unfortunate information as to what the medicine was which produced such results. In the country and smaller towns of our State this habit is not so liable to follow its prescription in the negro, first on account of his general ignorance, and next from his poverty, as well as from the less desire he has for this form of stimulant. In the large cities, especially the Northern ones, where the financial, social, and we might say, the *nervous* condition of the negro, are of a higher scale, we may find the opium habit more prevalent. As it is a known fact that the advances

made in the negro as a social being are bringing with them evils in the way of diseases incident to a higher civilization, information on these points is desirable, as a closer or more extended study of the subject may show other reasons for so little of the habit in the negro. An indulgence in the opium habit brings with it certain changes of character as to honesty, veracity, etc., and in the only case under observation the habit in the negro differs nothing in this particular from that in the white race. Dr. J. B. Mattison, of Brooklyn, New York, lays much stress on the fact that most cases, in fact, nearly all, of opium habit originate by commencing its use for the relief of pain, generally of a neuralgic character, and we know that the negro, owing to his lower nervous development, is not liable to diseases of this character.—*Gaitline's Medical Journal*.

**SALISBURY STEAK.**—The Salisbury steak is made by taking the best slices of the "round" on the beef, and chopping it with *dull* knives. The object is not to cut, but rather pound the meat. By thus treating it, the pulp comes to the top, and the tough, fibrous portion remains below. This pulp is scraped off and made into cakes, like sausage-cakes, or into the shape like a good-sized steak and *gently* broiled on a gridiron. It has been found that meat gently cooked is more digestible than raw. The fire must be good, so that the meat may be rapidly broiled—that is, be cooked on the outside and almost raw inside.

A little salt and pepper and a small amount of butter added make a not at all unpalatable dish, and one which contains *all* the strength of the beef, with the tough, indigestible portion entirely separated. This diet is used exclusively in chronic cases by physicians professing to treat according to the Salisbury method. They use but few drugs, and what they use are mainly tonics. The diet is used not only in diseased digestion, but diseases of liver, kidney, stomach, bowels, nerves, etc., and remarkable results are said to have been obtained.—*New York Medical Times*.

**LACTIC ACID AND TUBERCULAR LARYNGITIS.**—A discussion has taken place in the Berlin Medical Society on the value of lactic acid in laryngeal tuberculosis. Dr. Krause stated that, of fourteen undoubted cases he had treated in this way, some were improved, and some completely cured.

The least satisfactory cases were those where the posterior wall of the larynx was affected; also those where there was a lesion below the vocal cords which could not be well brought under the influence of the application. The voice improved, also the power of swallowing, and the general condition of the patients. Dr. Rosenberg confirmed the statements of Dr. Krause as to the good effects of lactic acid, but, for his own part, was still more satisfied with the results of a twenty per cent. solution of menthol. He was also treating pulmonary phthisis with menthol inhalations. Dr. Lublinski had had a certain amount of success with lactic acid, but found that, after the ulcers had healed, they again broke out. Professor Virchow pointed out that when these ulcerations healed, a cicatrix only was formed, not true mucous membrane. He hoped that further observations on this subject might be made, especially on cases that had healed for some time.—*British Medical Journal*.

THE GAIT OF NERVOUS PEOPLE.—MM. Giles de la Tourette and A. Loude, in order to determine the difference in the manner of walking characteristic of healthy people and that of those suffering from nervous diseases, have adopted the following method: A large sheet of wall-paper is laid on the floor, and a longitudinal line is marked in the middle. The feet of the person experimented on are marked with rouge. After the necessary calculations the impressions are reduced in size and photographed. Before studying locomotion in its pathological aspect, the experimenters ascertained the character of progression in a normal state. In each case the length of the foot was taken and the impression left by it. The width between the feet during the act of walking was also taken, the measurement of angle formed by the opening of the feet, and its relation to the axial line, traced on the paper. The following conclusions were drawn from the study of patients with bilateral and unilateral lesions, from the onset of the affection until the end: The pathological step is more regular than that of a subject in a normal condition, both in length and the lateral separation of the feet, also the angle formed by the opening out of the feet.—*British Medical Journal*.

TREATMENT OF UMBILICAL HERNIA.—The following simple method is recommended by Dr. Archambault (*Journal de Accouchements*, October 30, 1885), a piece of white wax is

rolled between the fingers into a little ball the size of a marble. It is then cut in two, and one of the halves placed, with its convex side down, into the umbilical depression, and retained there by a strip of adhesive plaster. In an hour or two the little hemisphere becomes sufficiently softened to adhere to the skin, and thus answers as a truss, without any other support.

**HIPPURATE OF SODA IN URIC ACID DIATHESIS.**—Garrod has already shown the effect produced by hippurate of soda on the decomposition of uric acid, and Dr. Bon highly recommends it in affections characterized by an excess of uric acid. The following are convenient formulæ :

R <sub>y</sub> .	Hippurate of soda, . . . .	gram. 5.
	Carbonate of listeria, . . . .	1.50
	Glycerine, . . . .	15.
	Distilled canella water, . . . .	250.
	M.	

Dose—15 grammes four times a day.

R <sub>y</sub> .	Hippurate of soda, . . . .	gram. 6.
	Chlorate of potash, . . . .	1.50
	Simple syrup, . . . .	20.
	Peppermint water, . . . .	200.
	M.	

Dose—15 grammes four or six times a day.

**RESORCINE IN EPITHELIOMA.**—Dr. Rubino Antonio reports a case in which he successfully applied resorcine to an epitheliomatous tumor, about the size of a pea, on the side of the nose of an elderly man. The tumor was apparently attached to the bone, and surrounded by an area of reddened and infiltrated skin. An ointment containing 15 parts of resorcine to 20 of vaseline was applied twice daily after the tumor was washed with permanganate of potash solution. The discharge diminished, and the tumor grew smaller, until at the end of five months nothing was left except a small cicatrix.—*Giornale Internaz. delle Scien.*

**IODOFORM IN CONSUMPTION.**—Dr. Veste, after having used iodoform in phthisis for some time in the form of inhalation, says that he has obtained very good results from it, either on the local morbid processes or on the general condition of the patients. Given internally, it produces no good effect, and it increases the fever. In apyretic and non-



tuberculous cases it has caused increased destruction of nitrogenized tissues, and Veste thinks, consequently, that this accounts for the increase of the fever. It does not re-appear in the urine when given internally, but is thus found when used externally.—*Les Nouveaux Remèdes*.

HUMAN BLOOD HYPODERMICALLY.—Prof. Von Ziemssen, of Munich, claims that subcutaneous injections of human blood are surprisingly beneficial in anæmia, while the blood of other animals is destitute of any remedial properties. The blood is obtained from the veins, defibrinated in a warm vessel, antiseptically injected toward the heart, and at the same time absorption assisted by active massage with oiled hands. The quantity is from 5 seven to fourteen, and is to be repeated only a few times at intervals of two to three days, according to improvement.

Prof. S. Fubini, of Palermo, has obtained almost instantaneous improvement in similar cases from repeated inhalations of a spray of twenty parts of defibrinated beef's blood, and eighty parts of a three-fourths per cent. solution of common salt.

A YOUNG physican, who has just established himself, and has very little practice, is noted for his braggadocio. One of the older physicians, meeting him on the street, yesterday, asked him how he was coming on. "I've got more than I can attend to," was the boastful reply. "I had to get out of my bed five times last night." "Why don't you buy some insect powder?" asked the old doctor.—*Ex*.

IODINE IN CHOLERA.—Among the varied cures for cholera, iodine occupies a somewhat important place. Maurice finds that a 1 per cent. solution destroys the comma bacilli. Dr. Renzi checks the vomiting with gtt. i doses of the tincture, and Dr. Senise, of Naples, considers the same dose with gtts. 2 to 4 of laudanum three times daily, a certain prophylactic.—*Chicago Med. Jour. and Exam*.

AN American and an Englishman were once having a heated discussion as to the relative size of the Thames and the Mississippi. The American finally clinched the argument thus: "Look here, mister; why there ain't enough water in *the whole* of the Thames to make a gargle for *the mouth* of the Mississippi."

**MERCURY AND ALBUMINURIA.**—At the Congress for Internal Medicine, held at Wiesbaden, in April, 1885, Dr. Fureringer reported that he had found, out of a hundred chosen cases, eight syphilitics with perfectly healthy kidneys who developed albuminuria during mercurial treatment: the maximum of albumen being five per cent. The internal and external exhibition of the mercury was followed by the same results which persisted during the whole of the treatment and disappeared some weeks after treatment was stopped. The alterations in the kidney were therefore not important, as was proven as well by microscopic examination. In another series of one hundred cases of syphilis which had not been treated with mercury, or were no longer so treated, and in which the kidneys had been healthy, he was able to establish in twelve per cent. an albuminuria consecutive to the syphilis. This in every case was discovered in the stage of the roseolar eruption. Here the urine contained formed cylinders which pointed to light nephritis. This form of albuminuria gave way to mercurial treatment. Therefore he argues that the existence of albuminuria is not a contraindication to mercurial treatment, which, on the contrary, should be prescribed as a necessity.—*Journal of Cutaneous and Venereal Diseases.*

**COCAINE IN WHOOPING-COUGH.**—Dr. Prior, of Bonn, has treated several cases of whooping-cough with cocaine with good results. As is evident on *a priori* grounds, he does not consider the drug a specific, but simply a means of relieving and reducing the number of the paroxysms. He used fifteen and twenty per cent. solutions to paint the fauces, the inter-arytenoid fossa, and the vocal cords, with the result of prolonging the interval between the attacks, and lessening the severity of these. The treatment was resorted to twice daily, great stress being laid on the necessity of producing at the time complete anesthesia of the fauces and upper part of the larynx. Inhalation of a twenty per cent. solution four times a day was not so successful as painting.—*British Medical Journal.*

**INTRODUCTION OF PREMATURE LABOR.**—Dr. T. Gaillard Thomas says: The method of inducing premature labor which I now invariably adopt is a very simple, and at the same time a perfectly efficient one. The patient is placed across the bed, with the buttocks resting near the edge, and

under is arranged a large piece of rubber or oil-cloth in such a way as to drain into a tub on the floor. In this tub we put one or two gallons of water at a temperature of ninety-eight degrees Fahrenheit. The operator stands between the thighs of the patient, whose knees should be properly supported, and employing a syringe with a long nozzle, which is carried up as far into the cervical canal as it will go, he keeps a steady stream directly against the membranes. In the course of ten minutes the os will be the size of a silver half dollar, and when dilatation to this extent has been accomplished, he is to insert a gum catheter between the membranes and the uterine walls. The patient is then put in bed, rhythmical uterine contractions soon follow, and the labor is completed in a few hours.—*Physician and Surg.*

VOMITING IN PREGNANCY.—In the *St. Louis Courier* we read of a young woman, primipara, of feeble constitution, who had vomited from the second month of pregnancy. At the end of the fifth month the vomiting became so violent as to threaten death, there being syncope, absolute prostration of power, noises in the ears, chills, cold and profuse sweats, frequent and filiform pulse, etc. In their turn antispasmodics had been used (ether, valerian, musk), then opiates, carbonated and iced drinks, iodine externally and internally, blisters upon the epigastrium, hypodermic injections of morphia—in fact, every known means of arresting vomiting—all without avail. It was suggested to try irrigations of ether upon the epigastrium. The effect was instantaneous; a single irrigation sufficed to cut short the vomiting. The patient drew a few long breaths, said she was cured and felt perfectly well. The vomiting returned twice, subsequently, and each time the ether irrigations arrested the trouble.

TREATMENT OF ACUTE RHEUMATISM.—Dr. R. H. Fox states in the *British Medical Journal* that in a severe case of rheumatism in which salicylate of sodium, potassium, quinine, colchicum and liniments had all failed to relieve the fever and pain, the relief was immediate after sponging with cold water and quickly drying the skin afterward. Although this is no new treatment, it is one which requires some courage to practice, and yet may be well adapted to certain severe cases in which the salicylic remedies are ineffectual.—*Therapeutic Gazette.*

## Book Notices.

---

A COMPLETE PRONOUNCING MEDICAL DICTIONARY: Embracing the Terminology of Medicine and the Kindred Sciences, with their Signification, Etymology and Pronunciation. With an Appendix, Comprising an Explanation of the Latin Terms and Phrases occurring in Medicine, Anatomy, Pharmacy, etc., together with the necessary Directions for Writing Latin Prescriptions, etc. By Joseph Thomas, M.D., LL.D., Author of the System of Pronunciation in Lippincott's "Pronouncing Gazetteer of the World," etc. On the Basis of Thomas' Comprehensive Pronouncing Medical Dictionary. 8vo. Pp. 844. Cloth, \$5.00. Philadelphia: J. B. Lippincott Co. Cincinnati: R. Clarke & Co. 1886.

We have seen it stated that if a person could secure no other books, he should by all means endeavor to own a Bible and Webster's Unabridged Dictionary. Our advice to medical students and physicians is to first purchase a copy of Thomas' Medical Dictionary, and afterward add to it as many other medical works as possible. The Dictionary should first be had for the reason that it is the key to the whole science of medicine.

The very full title-page of this very complete work so fully describes it that it is not necessary for us to enter upon a description of it. We will state, however, that it is what it professes to be—a medical dictionary. It can be consulted with confidence as regards orthography, etymology, pronunciation and definition. It is particularly adapted to those who have no knowledge of Latin or Greek, which, as all know, is of great assistance in understanding medical terms, as the majority of them are derived from the former language. But, unfortunately, many medical students begin the study of medicine without any knowledge of Latin. The work of Dr. Thomas, better than any other dictionary with which we are acquainted, makes up for this defect.

This work has a feature which is not found in other works of its kind, and which will be regarded of great advantage, namely, botanical names and terms are quite fully explained.

The present edition is fully abreast of the progress that has been made up to the present time. During the last ten



years hundreds of new words have been introduced into the various departments of medicine ; but they will all be found in this work and defined. The germ theory of diseases has caused many new words and expressions to be used ; so also have the recent advances in chemistry, physiology and pathology.

---

A TREATISE ON THE DISEASES OF INFANCY AND CHILDHOOD.

By J. Lewis Smith, M.D., Clinical Professor of the Diseases of Children in Bellevue Hospital Medical College, New York. Octavo. Pp. 867. 40 Illustrations. Cloth, \$4.50 ; Leather, \$5.50. Philadelphia : Lea Brothers & Co. Cincinnati: R. Clarke & Co. 1886.

We have now the sixth edition before us of this work which has met with such great favor among both physicians and medical students. The fact that it has passed through so many editions is the strongest evidence that it is held in high esteem by the profession.

The diseases of infants and children should meet with especial attention on the part of every practitioner of medicine. The great mortality which annually occurs among those who have only recently entered into the world, is not creditable to the medical profession. We know, of course, that they are subjected oftentimes, from the time of their birth, to most unfavorable conditions and circumstances on the part of parents as respects clothing, food, exposure, etc., as regards which physicians can have no control and are not responsible, yet too many medical men are disposed to consider their diseases as differing but little from those of adults, and the treatment of them requiring but little modification, as diminished doses in the medicines exhibited, etc. But the fact is, that while many of the diseases of childhood bear the same name as those which affect adults, yet they frequently differ greatly as to cause, course, manifestation of symptoms, complications, pathology, sequelæ, etc., while not a few ailments are peculiarly diseases of childhood. It is committing a most serious error to suppose that the diseases of infancy and childhood do not need to be especially studied in order to be successfully treated.

The author, Prof. J. Lewis Smith, has had great advantages in the way of qualifying himself to write instructively upon diseases of children. Besides holding the position of clin-

ical professor of children's diseases in Bellevue Hospital College, he is physician to the New York Foundling Asylum, consulting physician to the New York Infant Asylum, etc., to which may be added, we presume, the observations and experiences of a private practice. The work exhibits, from the first chapter to the last one, research and reflection—that it has been the aim of the writer to present to his readers all the important facts pertaining to the diseases of children.

In preparing the sixth edition, the author has revised the text to such an extent that a considerable part of the book may be considered new. Such thorough revision was required by the advancement of our knowledge of the diseases of children since the last edition was issued. Some of the important maladies in the book have been entirely rewritten, such as cerebro-spinal fever, scarlet fever, pseudo-membranous croup, and infantile diarrhea, and the treatment of many of the diseases has been revised. The index has been prepared by J. Lewis Smith, Jr., physician to the Class of Children's Diseases, in the Bureau for the Relief of the Outdoor Poor, Bellevue.

---

**A MANUAL OF OPERATIVE SURGERY.** By Lewis A. Stimson, B.A., M.D., Surgeon to the Presbyterian and Bellevue Hospitals, Professor of Clinical Surgery in the Medical Faculty of the University of the City of New York, etc. With 342 Illustrations. 8vo. Pp. 506. Cloth, \$2.50. Philadelphia: Lea Brothers & Co. Cincinnati: R. Clarke & Co.

This work is devoted exclusively to a description of the various operations of surgery. It leaves, therefore, to other works the imparting of instruction in the principles of surgery, surgical etiology, pathology, etc. By thus eliminating from its scope all subjects, except the one to which it is devoted, it is enabled to give fuller and more satisfactory descriptions of surgical operations—the instruments to be employed and necessary manipulations on the part of the surgeon, etc.—than a work, which embraces in its consideration all the subjects of surgery, possibly could. But, while the author is very full and plain in his descriptions, yet he says he has avoided that minuteness of detail in non-essentials which Mr. Syme, in vigorous language, has characterized as the “fiddle-fiddle instructions, not only for

using, but even holding, the knife, which denotes poverty of intellect and lowness of aspiration."

The practitioner and student of surgery will find in the work very full and complete descriptions for ligating each one of the various arteries, also the most approved methods of performing the different amputations—from the amputation of a finger and toe to that of the arm at the shoulder joint and of the leg at the hip joint. After describing the many operations of amputation, there follow descriptions of excisions. Part V. of the work is devoted to Neurotomy and Tenotomy; Part VI., to Plastic Operations upon the Face; Part VII., to Operations upon the Eye and Its Appendages. But it is not necessary for us to mention in detail the operations described. It will suffice to state that all those with which a surgeon is apt to meet, and are usually set forth in works upon surgery, are given full attention, and are described in so plain a manner that there can be no difficulty in understanding them.

Medical students will find the work of great assistance to them in reviewing the instructions they receive at college upon operative surgery. The practitioner also, who contemplates the performance of any surgical operation, will be aided greatly in consulting it. It has reached a second edition.

---

CLINICAL NOTES ON UTERINE SURGERY. With Special Reference to the Management of the Sterile Condition. By J. Marion Sims, A. B., M. D., Late Surgeon to the Woman's Hospital, New York. 8vo. Pp. 401. Paper, \$1.00. New York: William Wood & Co.; Cincinnati: Garfield.

This is a work by the highly distinguished gynecologist, Dr. J. Marion Sims. Dr. Sims was undoubtedly, during his lifetime, the most eminent physician of diseases of women in this country, and his writings, for a long time to come, will be regarded as authoritative in these affections. The cheap style in which the Messrs. Wood & Co., of New York, have published them, places them in the reach of every physician, though in very straitened circumstances. Ordinarily, works as large as the volume before us, in leather binding, would cost five or six dollars, while the price of it, in paper covers, is only one dollar. The paper upon which it is printed presents a beautiful white appearance, and the

type is large and plain. The title-page has the imprint, "MEMORIAL EDITION."

Of such a high order is the work, and so very cheap is it, we would expect every physician in this country would secure a copy.

Dr. Sims relates a very interesting case he met with in Paris. He was called to see a lady who suffered greatly from menorrhagia—the uterus being retroverted and greatly enlarged. He diagnosed a polypus tumor in the womb. It seemed that his digital examination produced contraction of the uterus so that the tumor was forced into the vagina. At least this was the explanation of the *modus operandi* of the polypi getting into the vagina, on finding them there a week afterward. The next day, on first seeing the case, he went to London and was gone for a number of days. After he had been away five or six days, he was telegraphed by a council of physicians that the woman was much worse and could not live, and, therefore, he need not return to perform the contemplated operation of removing the polypi. Fortunately he did not receive the telegram, and went back as had been agreed upon. When he again saw the patient she was having a profuse, dirty, offensive, sero-sanguinolent discharge from the vagina, which poisoned the whole atmosphere of the apartment. Her pulse was small and rapid; she was quite anemic, and presented all the appearance of blood-poisoning. On passing his finger into the vagina, he found it entirely filled by an immense fibroid polypus in a state of decomposition. She was evidently dying from the absorption of the detritus of this fetid mass. "What was to be done? There was assuredly but one course to pursue. If we allowed this great mass to remain there and slough away, death was absolutely certain. Its speedy removal gave the only hope of rescue. Her physicians consented to its ecrasement, which occupied ten or twelve minutes. Vaginal washes, wine, and a generous diet soon completed the cure. If I had received the telegram, she would certainly have died, and I should have been censured by her friends for hastening the fatal issue, inasmuch as my previous visit was the inauguration of a new phase of her sufferings. If I had been afraid to operate because she was almost in a moribund state, she would unquestionably have been lost." He says he relates this case to encourage young men never to falter in the clear path of duty.

On another page he says that the removal of a polypus by



ligation is really a dangerous operation, resulting not unfrequently in pyemia and death, which seldom indeed happens when the ecraseur is used.

**INORGANIC CHEMISTRY.** By Edward Frankland, Ph. D., D. C. L., LL.D., F. R. S., Professor of Chemistry in the Normal School of Science, London; and Francis R. Japp, M. A., Ph. D., F. I. C., Assistant Professor of Chemistry in the Normal School of Science, London. With 51 Illustrations and a Plate. 8vo. Pp. 693. Leather, \$4.75. Philadelphia: Lea Brothers & Co.; Cincinnati: R. Clarke & Co.

This volume constitutes a work upon chemistry in which inorganic chemistry alone is considered. The authors have constructed it on those principles of classification, nomenclature and notation, which, after an experience of nearly twenty years, they have found to lead most readily to the acquisition of a sound and accurate knowledge of elementary chemistry.

In the introduction the authors state that they have endeavored to present to the student a connected account of the chief chemical theories at present prevailing, introducing only so much descriptive matter as is necessary for the elucidation of the subject. Afterward in the descriptive part of the work, the necessary references are given.

If not in our ordinary seminaries, academies and colleges, we would think that this work should supersede other works of its class in the medical colleges. It is certainly better adapted than any work upon chemistry, with which we are acquainted, to impart that clear and full knowledge of the science which students of medicine should have. Many of the works now in use are too elementary in their character and afford a too smattering insight. Physicians have more need of chemical knowledge than persons of other professions and callings, and consequently should have fuller textbooks when students. A medical man draws upon his chemical knowledge every day, and frequently has chemical questions presented him for solution of considerable importance. Although he may not possess the qualifications of an expert, nor have his skill in manipulation, yet he should be well-grounded in the principles of chemistry and be able to apply them to all the departments of his profession.

Physicians who feel that their chemical knowledge is be-

hind the times, would do well to devote some of their leisure time to the study of this work. The descriptions and demonstrations are made so plain that there is no difficulty in understanding them.

---

CLIMATOLOGY AND MINERAL WATERS OF THE UNITED STATES.

By A. N. Bell, A. M., M. D., Editor of the *Sanitarian*,  
Member of American Public Health Association. 8vo.  
Pp. 386, Cloth. New York : Wm. Wood & Co.; Cincinnati : P. C. Garfield.

Not only physicians, but scientists generally, in fact, all intelligent persons interested in whatever pertains to health—will regard this as a highly valuable and interesting work. It belongs to the series of volumes composing “Wood’s Library of Standard Medical Authors.”

The author defines CLIMATOLOGY as the sum of the influences exerted upon the atmosphere by temperature, humidity, pressure, soil, proximity to the sea, lakes, rivers, plains, forests, mountains, light, ozone, electrical conditions, and, doubtless, by some other conditions of which we have no knowledge. Adding to these conditions or phenomena the subject of Mineral Springs, and a pretty good idea of the scope of the work will be had.

Our country embraces so large an extent of territory that it has nearly every variety of climate and soil. In its northern and northwestern parts there is experienced, in the winter season, the cold of the frigid zones—the thermometer sinking sometimes to  $30^{\circ}$  and  $40^{\circ}$  below zero—in the central portions there exists the moderate temperature of the temperate latitudes, while in the most Southern States, as in the torrid climates, there is no winter, and vegetation flourishes throughout the year. As regards soil there is every kind, from the most fruitful to barren sandy deserts.

The amount of practical, valuable information contained in this work is very great indeed. It explains the causes of heat and cold, variations of temperature, humidity, extent and physical properties of the atmosphere, winds, relation of them to certain diseases, effects of forests, connection between the fall of the barometer and painful sensations in the limbs, and very many other phenomena that we have not time nor space to mention. But it is not a work devoted only to a department of natural science, but treats of the climatology and the mineral springs of the United States with

reference to health, disease, and the cure of disease. Few physicians have the scientific knowledge they should of the action of climate upon health, the predisposition to certain diseases produced by it, and the curative properties of mineral springs.

---

DIAGNOSIS OF DISEASES OF THE BRAIN AND OF THE SPINAL CORD. By W. R. Gowers, M.D., F.R.C.P., Physician to University College Hospital and to the National Hospital for the Paralyzed and Epileptic. 8vo. Pp. 293. Cloth. New York: William Wood & Co. Cincinnati: Garfield.

This volume forms the December number (1885) of "Wood's Library of Standard Medical Authors."

The work consists of the author's lectures, very little changed, delivered at the University College Hospital, London. There are eighteen lectures upon diseases of the brain, and six lectures upon diseases of the spinal cord. While there is no class of diseases more interesting than those of the brain and spinal cord, there is certainly no class more difficult of diagnosis. Generally, when there is a serious affection of the brain, we know that it is the seat of disease, but we often find it impossible to ascertain the part of the encephalon that is involved and the precise nature of it. There is not, however, at this time, the difficulty of locating brain diseases that there formerly was, in consequence of the great advance that has been made in our knowledge of the physiology of the nervous system, from studying not only its structure, but from observing mental phenomena, muscular movements, etc. Still we are now and then astonished by finding in the brain a tumor as large as a walnut or even larger that exhibited no indications of itself during life.

The author has made diseases of the brain and spinal cord subjects of close study, and physicians will therefore find in this work recorded a large amount of valuable experience and observation. Some three chapters of the work are devoted to the medical anatomy of the brain. These anatomical details will not be found to be merely a rehash of the anatomical descriptions found in works upon anatomy, but they consist in locating motor tracts, sensory centers, etc., with descriptions of the effects of disease. For example, we will quote from page 11, where he is de-

scribing the region of the "cerebral cortex." "This region," he says, "is certainly motor, but it is certainly also not exclusively motor. Its destruction by disease causes persistent paralysis, corresponding in distribution to the part destroyed; irritation of it causes convulsions, that begin in the limb corresponding to the part irritated. But destruction of these parts causes also some loss of sensation, chiefly in the extremity of the limb most paralyzed, and accompanied by an inability to recognize the position of the extremity, hand or foot—an inability which may be out of all proportion to the loss of cutaneous sensibility, and even, strangely enough, may exist alone."

In several lectures, after discussing the symptoms of brain diseases generally, he proceeds to treat of motor symptoms, convulsions, sensory symptoms, affections of speech, of the mind, etc. Of course, there is much yet to be learned in regard to the physiology and pathology of the brain, for it forms a most extensive field of research, but undoubtedly Prof. Gowers exhibits, in his work, the results of the most recent researches.

A work that will afford any substantial aid in diagnosing and locating the many obscure affections of the brain and spinal cord, must be regarded by every physician as one of great value. In this busy world, where the struggle for existence is constantly increasing, brain diseases are becoming more and more common.

---

DISEASES OF THE LUNGS (of a Specific, not Tuberculous, Nature): Acute Bronchitis, Infectious Pneumonia, Gangrene, Syphilis, Cancer and Hydatid of the Lungs. By Prof. German See, Physician to the Hotel Dieu, Paris, France. Translated by E. P. Hurd, M.D., Member of the Massachusetts Medical Society, etc. With Appendices by Geo. M. Sternberg, M.D., Surgeon U. S. Army, and Prof. Dujardin Beaumetz, Physician to the Hospital Cochin, Paris. 8vo. Pp. 398. Cloth. New York: William Wood & Co. Cincinnati: Garfield.

This work forms one of the series of "Wood's Library of Standard Medical Authors." We have not space to notice it as fully as we desire in the present number of the MEDICAL NEWS, and, therefore, we must defer doing so until our next issue. We will merely mention that the author, Prof. See, believes in the discoveries which Pasteur and Koch claim to



have made. We quote from his preface: "Pasteur and Koch, in opening before us the world of microbes, and in revealing the all-influential role of these minute organisms in the development of diseases, have brought to view a new field for experimentation. The results we are now realizing. We know to-day what is the real cause of septicemia, of purulent infection, of anthrax, of tuberculosis, of cholera. The words *miasm*, *virus*, under which we have so long concealed our ignorance, are destined to disappear from scientific medicine. To this vague idea of an impalpable and immaterial cause of the disease, we have substituted the knowledge of a visible thing able to reproduce and multiply itself *ad infinitum*, but which may also be attacked and destroyed by appropriate means."

---

VENEREAL MEMORANDA. A Manual for the Student and Practitioner. By P. A. Morrow, A.M., M.D., Clinical Professor of Venereal Diseases in the University of the City of New York, etc. 32mo. Pp. 332. Cloth, \$1.00. New York: William Wood & Co. Cincinnati: R. Clarke & Co.

CUTANEOUS MEMORANDA. By Henry G. Piffard, A.M., M.D., Clinical Professor of Dermatology, University of the City of New York, etc. 32mo. Pp. 268. Cloth, \$1.00. New York: William Wood & Co. Cincinnati: R. Clarke & Co.

These two little works we notice together. They do not, of course, profess to be full treatises upon the subjects mentioned upon their title-pages. They are, however, far more complete than would be supposed from their small size. They will serve an excellent purpose in the way of refreshing the memory, and making a hasty review when there is not time to consult larger and fuller works.

Probably the little work devoted to venereal diseases will be considered the more valuable of the two, not because more talent is displayed in its preparation, but, simply, for the reason that its subject enables it to be made the more practical. Under the head of "Venereal Diseases" the author comprehends three distinct affections—gonorrhœa, chancroid and syphilis.

The author begins his work with the consideration of gonorrhœa. This affection is concisely, but very satisfactorily, described. The treatment laid down is that which

experience has most approved. After discussing gonorrhœa, he takes up in order chancroid and syphilis. The latter disease, of course, receives the largest attention. The work contains a large number of quite valuable formulæ.

The little work upon cutaneous diseases has reached a third edition. It contains some twenty-four chapters, which are devoted to a description of the most common skin affections. It is indeed quite a valuable little book, and contains a large amount of practical information. An examination readily discloses the causes of its popularity as evidenced by the number of editions it has passed through.

---

A GUIDE TO THE PRACTICAL EXAMINATION OF URINE. For the Use of Physicians and Students. By James Tyson, M.D., Professor of General Pathology and Morbid Anatomy in the University of Pennsylvania, etc. 12mo. Pp. 249. Cloth, \$1.50. Philadelphia: P. Blakiston, Son & Co. Cincinnati: R. Clarke & Co. 1886.

This work, so popular among physicians and medical students, has now reached its fifth edition. It has been but a year since the fourth edition was sent forth—it having followed upon a previous edition that was very large, but which became exhausted in a short time.

A cursory examination will disclose the cause of the great popularity of the work among those for whom it was written. It has been prepared to suit the wants of physicians in a special manner, the leading principles of urinary analysis being set forth in a plain and concise way.

With an amount of chemical knowledge, which every practitioner is supposed to have, and with some knowledge of microscopic manipulation, a physician, with the aid of this work, will find no difficulty in making satisfactory examinations of the urine, and understanding the meaning of any phenomena that may be disclosed. The cuts are exact illustrations of deposits when examined with the microscope.

---

HYGIENE IN JAPAN.—A Bureau of Public Health, on the plan of those existing in Germany, has just been instituted in Tokio. The Director is Prof. Ogata, who has studied for several years in Munich, Leipzig and Berlin, especially in the laboratories of Pettenkofer and Koch.

## Editorial.

A NEW VOLUME.—With the present number the MEDICAL NEWS begins its *nineteenth volume*, or year. Eighteen years ago, January, 1868, it started forth to meet the favor of the profession as a vehicle of instruction in the way of bringing to all who should subscribe for it, the latest intelligence of all discoveries in medicine, which should tend to advance its progress. From that time to the present it has never missed a single monthly issue, but as each month has rolled around, it has found its way to the office tables of its subscribers.

How many are the changes which have occurred since the MEDICAL NEWS began its existence. Probably not more than twelve or fifteen medical journals of the 150 that were competing for favor are now published. Of those who were compelled to yield to a want of patronage, some continued two or three years, others held out for five or six years. Many of the suspended journals were excellent ones, and it seemed a pity that they had to stop; but, as they could not be kept up except from the private resources of their projectors, they had to be discontinued. We know of a number of editors who, for the sake of being editors, involved themselves to the amount of five or six thousand dollars. Prof. Parvin, now of Jefferson College, Philadelphia, began a journal a number of years ago at Indianapolis. There was no better monthly medical journal published in this country, but, after losing a large amount of money, he was compelled to relinquish its publication.

Prof. Parvin had guarantees, we understand, that he would be sustained by the profession of Indiana if he should begin the publication of a medical journal. A sufficient number of physicians pledged themselves to take it to meet the expenses if they had promptly paid their subscription price; but to their shame (we certainly do not wish to use a too strong term), they let the journal be sent to them year after year without remitting a cent. The result was, after struggling along for several years, hoping his *friends* would remember their obligations and remit their dues to him, he had to let the enterprise go after having sunk several thousand dollars.

At eighteen years of age a medical journal is entitled to be regarded an old medical journal. We have met and

overcome the difficulties of establishing the MEDICAL NEWS, and the lookout presents to us fair sailing. We have many thousands of dollars honestly owing to us throughout the country, but as we have succeeded in getting along without it so far, we can succeed without it in time to come. Its loss does not jeopardize the MEDICAL NEWS, but we need it and ought to have it. But this fact releases no one from his obligations to us, or, as Rev. Sam Jones would have it, his obligations to himself; for, as he says, no man will ever reach heaven who withholds from his fellow the dues he owes him. We believe precisely what the Rev. Sam states, and, therefore, are of the opinion that they who swindle us do so at a fearful cost to themselves. To be religious and owe any man anything is a condition that is not recognizable by the Bible or by men of integrity.

But to business. We propose the coming year to improve on the years of the past, and to furnish our subscribers the very best medical journal that can be issued for the money. Each number of the MEDICAL NEWS contains seventy-two pages of reading matter exclusive of advertisements, which amount, in a year, to 864 pages. The binding of a volume, in good, substantial binding, costs 75 cents. At the end of each year, therefore, a subscriber is able to place upon the shelves of his library a handsome book that has cost him only \$2.75. Ordinary medical works, containing a like amount of reading matter, will cost from five to six dollars. But a bound medical journal is more valuable than any ordinary medical work, in that it can be consulted for information upon nearly every subject in medicine, and, besides, in its information it is usually as much as three years in advance of recent publications issued by publishers of medical books.

Besides scientific matter, we propose, as we have done, to furnish such items of medical news as will be of interest to every physician. Examine the eighteen volumes of the NEWS that have been published, and they will be found to contain an epitome of the history of the medical profession in this country during the last eighteen years, in the brief items of professional news they have given from month to month. In the obituary notices there has been recorded, in the sketches of the lives of those who have ceased from their labors, a history of medicine in this country that is alone worth the price of the volumes. Many most distinguished men have died during the last eighteen years, and in the



biographical notices of these most important facts have been developed and placed upon record.

In conclusion, we will express the hope that those who are indebted to us will remit, so that we can balance our accounts for the year 1885. Although we state that our terms are in advance, many very clever gentlemen who pay their subscription, think that it will satisfy us to receive payment at any time during the year. We will say, however, that a subscription paid in advance, or during the first or second month, is of more value to us than one paid us in the middle of the year or at its close. We hope that as many as possibly can, will remit to us without delay. By so doing, they will confer a favor.

The December issue having been greatly delayed in consequence of circumstances we could not control—one item in which was that we were compelled to make up the Index at odd times ourself, not having the benefit of any assistance—the present number has been necessarily kept back. We expect soon to be able to catch up and get the journal out from the 15th to the 20th of the month of its date.

CARBOLIC ACID AND CORROSIVE SUBLIMATE AS ANTISEPTICS.—A good many interesting facts have recently been discovered as regards the efficacy of carbolic acid and corrosive sublimate as antiseptics. We have seen it stated that the germ theory receives confirmation from the fact that those substances which have been shown to be most effective in destroying micro-organisms have proved most useful in treating septicemia; and that it has been established beyond question that the washing out of the uterus with antiseptics in cases of puerperal fever is followed by the most remarkable results. Until recently carbolic acid was the favorite antiseptic, and many still consider it the most efficacious. The experiments of Koch and of others, however, go to show that corrosive sublimate is much more destructive to microbes.

For the information of our readers we have collected a number of facts from the experiments of Koch which exhibit quite fully the comparative merits of the two principal antiseptic agents. They show that the spores of anthrax bacillus would still grow after immersion for seven days in a 2 per cent. solution of carbolic acid, as also they did after immersion for a day in a 5 per cent. ( $\frac{1}{20}$ ) solution. But after immersion in a solution of  $\frac{1}{10000}$  of corrosive sub-

limate for from 5 to 60 minutes, the same spores became sterile; in fact, immersion for 10 minutes in solutions up to  $\frac{1}{20000}$  also sterilized the spores. He places the limit of the action of the sublimate on the spores of anthrax bacillus as lying somewhere between a  $\frac{1}{20000}$  and a  $\frac{1}{50000}$  solution. His experiments on mice were very interesting. Three spore-laden threads were dipped for 10 minutes in solutions of  $\frac{1}{10000}$ ,  $\frac{1}{20000}$ ,  $\frac{1}{50000}$  respectively, and then introduced beneath the skin of different mice. The  $\frac{1}{50000}$  mouse died next day, as rapidly as if the spores had been fresh. The  $\frac{1}{20000}$  one died on the fourth, the  $\frac{1}{10000}$  on the fifth day. These last showed, therefore, an extraordinary prolongation of the period of incubation which may fairly be attributed to the action of the sublimate. The same experiment was repeated with the difference that the spores lay for 1 hour instead of 10 minutes in the solutions. The  $\frac{1}{50000}$  mouse died in 40 hours; the  $\frac{1}{20000}$  mouse in  $3\frac{1}{2}$  days; the  $\frac{1}{10000}$  mouse survived. "Sublimate is, therefore, the only one of all recognized antiseptics which possesses the very important peculiarity, that it kills by a single application of a comparatively weak ( $\frac{1}{10000}$ ) solution for a few minutes all, even the most resistant, spores of micro-organisms; even with a solution of  $\frac{1}{50000}$ , a single dipping was sufficient."

A great deal has been said against corrosive sublimate owing to toxic effects which have followed in a few cases. Koch has, however, pointed out that its action on germs is so rapid that long immersion is not necessary. In cases where we might be afraid of too much absorption of the sublimate, an injection of water might be given immediately after the antiseptic one without diminishing the effect of the latter. The  $\frac{1}{10000}$  to  $\frac{1}{20000}$  solution is now widely used in this country, and we have never heard of any bad effects.

---

EXPLORATIVE LAPAROTOMY.—"To cut a man open in order to see what is the matter with him," has been a suggestive expression that we have heard ever since our boyhood days; but we never knew it to be acted upon. Twenty years ago, on meeting with a case in which the abdomen was terribly swollen by gas retained in the bowels, and the sufferings of the patient were very great, we suggested passing a small trocar and canula through the abdominal walls into one of the large intestines, that the flatulence might be relieved. We were assured by an eminent physician, who was present, that death would

certainly follow upon such a proceeding. We replied that a fatal result must take place in a few hours unless relief was given to the tympanitis; and, as the means we suggested was the only method that seemed to be left us to accomplish the end, after having tried all other available means, it would be proper to adopt it—that though it should not prove successful, it would not harm the patient, who would soon be dead if not speedily relieved. Our advice, however, was not adopted, as it seemed to our friends an unjustifiable operation to wound the peritoneum by a puncture, although it was evident that the terrible tympanitis would soon destroy the patient, and that death would not be even hastened by passing a trocar through the abdominal parietes.

Laparotomy, however, nowadays, is regarded very differently to what it used to be. It is now employed, not merely for the purpose of giving relief, but also for diagnosis. It is stated that Lawson Tait, when he was recently visiting this country, on being asked for an opinion regarding the nature of an abdominal tumor, said, "Cut the patient open and find out." And the patient, as we learn, was cut open and saved from death. In the case which we related, a fatal issue might not have been averted by the plan we proposed, but no one, at this time, would regard that the necessary wounding of the peritoneum should have any weight in considering the propriety of adopting the plan. In an editorial in the journal of the *American Medical Association*, it is stated that a New York surgeon recently expressed himself as having no more fear in opening the peritoneum to-day than he had five years ago in operating upon the cervix uteri.

In the same editorial to which we have alluded, it is said that Dr. Fowler divides the cases calling for explorative laparotomy into four cases: 1. Cases in which a diagnosis can not be made without opening the abdomen and exposing the parts to the direct touch, or even perhaps the sight, of the surgeon, but in which further interference is thereby shown to be impracticable or uncalled for. 2. Cases in which provisional diagnosis only can be made, unaided by abdominal incision, and in which but slight additional risk is incurred by an immediate and radically curative procedure, based upon the knowledge thus gained. 3. Cases in which a diagnosis has been made, but in which doubt exists as to the practicability of performing a radical operation; and

cases in which the choice of the particular operation best adapted to the individual case must be decided upon after incision and exploration. 4. Cases in which the patient's life is in imminent peril, and in which it becomes imperatively necessary to at once locate the lesion threatening life, and to be prepared to act promptly upon the knowledge gained by opening the abdominal cavity.

---

CAUSES OF CANCER.—Dr. Alderson, in the *Medical Press*, considers that in some instances mental affection may be the cause of cancer. The only case of cancer of the liver he ever met with, he believes was brought about by great excitement and mental worry. He regards locality as an important factor in the cause of the disease. Of ten cases, whose history he gives, four of them, he thinks, may be attributed to living near the river Thames. In fact, he states that, so far as he can recollect, all of his cancer cases, whether uterine or mammary, have resided more or less within an altitude of only eighteen feet above the mean level of the sea, several as low as six, seven, or ten feet. While engaged in writing his article, a waterman, whose wife had died from scirrhus of the os uteri, showed him his tongue which had been partly excised for epithelioma. This man and his wife had lived in a little cottage, where they were frequently exposed to be flooded at high tides. The husband was a great chewer and smoker, and he himself was disposed to ascribe his cancer to his excessive use of tobacco.

Mr. C. H. Moore, twenty years ago, pointed out the greater prevalence of cancer in certain towns and counties than others. London, he said, while it was the healthiest city in the world, has the highest mortality from cancer, and Wales the lowest. Every one knows what a damp, foggy place London is. He also gave mortality tables showing the excessive high death rate in several low lying districts.

Cincinnati has a river running along its southern border, but as the greater part of the city is situated upon a plain high above the river, the residences are but little, if any at all, exposed to any dampness from it. There are comparatively but few cases of cancer met with among its citizens. Whether or not, however, that this may be due to its freedom from dampness, we will not venture to say; Mr. Alderson would probably consider that it was.

It is certainly worth the while for physicians to notice the effect of locality in producing cancer. It certainly would



be interesting to know if living in low, damp places has any tendency in increasing the liability to cancer; or if living near a river or large body of water has the same influence. Excessive tobacco smoking, especially when a pipe is made use of, has long been regarded as cause of cancer of the tongue and other parts of the mouth. The question, however, has never been definitely settled. Probably the majority of men smoke. But it has not been demonstrated, so far as we know, that all the cases of cancer of the mouth, or the great majority of them, are confined to these smokers.

---

THE FOCI OF CHOLERA IN SPAIN.—A recent number of the *Lancet* (January 16th) has an editorial upon this subject. It states that cholera still prevails in Spain, and that there will undoubtedly be an outbreak of it in that country next season. It seems that nothing has been done by officials in the way of improving "pernicious localities," by which, we suppose, is meant stagnant pools of water, places where offal is dumped, etc. A correspondent of the *Lancet*, visiting Spain, reports that the dwellings of the poor, and those of moderate means, are cleaner than similar residences in England. Houses were whitewashed, cleaned and fumigated, and disinfectants thrown down the drains. The bedding, the floors and the furniture were most carefully washed.

But when the sanitary contrivances of residences are examined, great faults are evident. The untrapped closet, just outside, when it is not in the very middle of the kitchen, is a most common occurrence in Spain. From the kitchen sink a large pipe goes to the closet-pipe, and all the sewer gas has free access to the cooking utensils and the food. In cholera localities these and many other equally obvious defects exist, and it was found that a large proportion of the cases occurred in rooms where there was no window at all. In other rooms the principal ventilation was received from a foul closet just outside the door. It is therefore indispensable, says the *Lancet*, to secure at once the proper ventilation of sleeping apartments, and the necessary alteration in the construction of the closets, together with the trapping of all drain-pipes.

Further on the *Lancet's* editorial states that so large a portion of Eastern and Southern Spain has now been invaded by cholera, that it is easy, acting on the large experience already acquired, to select in the (as yet) exempt

districts to the west of the peninsula, towns and localities that present similar topographical and general conditions. In such places, at least, a large number of inspectors must be appointed, and they should commence at once a house to house visitation, for the purpose of detecting and altering those structural defects which, in the towns of Granada, Valencia, Barcelona, Zaragoza, etc., were found to favor the development of cholera. This is the least, which, under the circumstances, can be done; and if this is not attempted, Spain will merit the censure of European civilization. In Portugal also, says the *Lancet*, the adoption of similar precautions will be found more efficient as a protection against the approaching epidemic than the sanitary cordons and quarantines on which the Portuguese Government at present solely relies.

---

**KNIGHTED.**—Eminent medical men receive recognition from those in authority in England, where learning and talent are held in esteem. It is probably owing to our form of government that public honors are not conferred upon individuals in this country noted for their great ability and acquirements. But even if the way was open for public recognition of learning by action in the power of the President or the National Congress, it is not unlikely that those most meriting honors would not receive them, and that they would be diverted, through political influence, and bestowed upon those little worthy of them. It is a great misfortune that politics has the great control which it possesses in this country.

We not unfrequently hear of an eminent medical man being knighted in England. This honor makes it proper for him to be addressed as *Sir*. The latest addition to the roll of members of the medical profession who have recently received the honor of knighthood, is the name of Mr. Dalby, the well-known aural surgeon. Mr. Dalby was born about the year 1840 (and is consequently still in the prime of life), took his B.A. degree at Cambridge University in 1863, and graduated M.B. in 1866. In 1870 he became a Fellow of the Royal College of Surgeons, having previously, in 1867, become a member of that corporation. He is the author of several works on diseases of the ear, and of many contributions to the pages of the various medical and scientific journals. To non-professional readers Mr. Dalby will perhaps be best

known as the able and ardent advocate of the pure oral method of educating the deaf and dumb—*i. e.*, by means of lip-reading and articulation. Several communications from him have appeared in the pages of the *Lancet*, in support of the revolution which has taken place in the education of the deaf, and the plan propounded by him is now almost universally adopted throughout the United Kingdom. Mr. Dalby, who has had a severe attack of bronchitis has recently been on a voyage to Madeira and back, only returning to England January 5th.

---

DECEASE OF DR. T. M. BROWN.—Just as we are closing the present number of the MEDICAL NEWS, we are pained to learn that Dr. Thomas M. Brown has died. He was a good man and died full of years, having been born eighty years ago in Newtown, Hamilton County, O. It was but a short time ago we met him upon the street and talked with him. While he was a small, delicate-looking man, he seemed to have the sprightliness and activity of one not more than forty years old. He impressed us that, though he was then eighty, the prospects were good of his living twenty years longer. But the future is hid from us, and we know not what may occur in a short time. Experience, however, has taught us that, when we meet with an aged friend, however well he may appear, there are not a few chances we will never see him again alive.

In 1827, Dr. Brown became a student of medicine under the instruction of Dr. Williams, of Milford, O., long deceased. Three years later he graduated from the Medical College of Ohio. Marrying a daughter of his preceptor in medicine, in 1835, he connected himself with him in the practice of medicine. This partnership between father-in-law and son-in-law continued until the death of the former—many years.

For thirty-five years he continued to be a busy and active practitioner, having a large practice, in Milford; and, in 1865, he retired from his profession and removed to Cincinnati, deciding to pass his declining years in this city, where several members of his family resided.

The Doctor was of mixed Pennsylvania and Virginia descent. His paternal grandfather is said to have been the founder of Brownsville, Pa., while his maternal grandfather, Capt. Aaron Mercer, came from Winchester, Va., in 1792,

settled in Columbia, now a part of Cincinnati, and is highly spoken of in the early annals of the State.

Dr. Brown was an upright man, gentle and affable in manners, and had the esteem of all who knew him. While he did not attain to a distinguished position in his profession—for the practice of a medical man in a village and surrounding country is too laborious to give time for a hard study, and affords too little variety of diseases among the sturdy, healthy people of the locality, who all live alike, for a large and valuable experience—yet he was regarded a safe and reliable practitioner, whose skill was equal to that of any of his contemporaries. He was a member of the Pioneer Society of Cincinnati, and he will undoubtedly be greatly missed by them.

One by one the aged drop off, leaving those who were but children when they were middle-aged to take their places, and soon, like themselves, to become the old men and women of the period. *Tempus fugit.*

---

DEATH OF AN EMINENT CHEMIST.—All who knew him, will learn with sorrow of the recent decease of Professor Edward S. Wayne, who was a resident of Cincinnati until failing health caused him to go East. He died of paralysis at the residence of his sister in Philadelphia.

Prof. Wayne was one of the best known chemists in this country. He was born in Philadelphia, and came to this city about twenty-five years ago. He had learned the apothecary business in Philadelphia, and soon after his arrival in Cincinnati connected himself with a drug and chemical house on Walnut Street.

Just before the breaking out of the Civil War he was associated with General Rosecrans and M. Hartshorn in the manufacture of coal oil from coal by some elaborate chemical process. In 1863 he became connected with the wholesale drug and chemical firm of Suire, Eckstein & Co., then located at the northwest corner of Vine and Fourth Streets. Here Prof. Wayne had charge of the laboratory, and attained such a reputation as an analyst that his annual salary reached \$6,000.

Prof. Wayne left this city last July for the East on account of bad health, having become a sufferer from hardening of the brain, that practically unfitted him for business. He went to Philadelphia, subsequently to the seashore, and still



later to the Sanitarium at Wernersville, Pa., whence he was removed to the residence of his sister in Philadelphia, and died there. He leaves a widow and no children. Mrs. Wayne (born Wayne) is a sister of the Mrs. Wm. Woods who, with her husband, was wrecked and drowned in Lake Superior two or three years ago, and also a sister of Joseph W. Wayne, of Cincinnati.

---

DECEASE OF DR. JOHN DICKSON.—This gentleman, one of the best known physicians in Pittsburg, died December 9th at his residence at Edgewood, aged seventy-four. His death resulted from a fracture of the hip sustained six weeks ago. He was born in Cecil County, Maryland, in 1812. He was a graduate of Jefferson College, Canonsburg, and took a degree of medicine in New York at the age of nineteen. Beginning practice at Sewickley, he speedily won success, and in 1837 he attended lectures in Edinburgh and Dublin. He was a volunteer surgeon in the war. He was in active practice for fifty-four years. He was a man of noble character, and universally honored in his profession.

---

NEW YORK PHYSICIANS SEEKING PROTECTION.—Drs. E. G. Janeway, A. Jacobi, Austin Flint, and twenty other physicians, have sent to the Board of Health a written protest against the liability to suits for damages which physicians are made to assume when in good faith they report supposed cases of contagious diseases. A recent suit against a physician, who reported that a woman had smallpox when she was suffering from another disease, was the cause of the protest. It was said that physicians might neglect to report dangerous cases of typhus fever or smallpox if something was not done to change the law. The Board was urged to prepare a bill for the Legislature to exempt physicians from the legal consequences of too hasty reports in cases of suspected contagion. No action was taken on the communication.

---

VICK'S FLORAL GUIDE.—The last holiday number has been received by us. Its merits are fully up to previous ones. The colored plates of flowers are very beautiful indeed. The several hundred wood-cuts of flowers, vegetables, and plants are highly interesting, and will be examined and studied with pleasure by all who love the garden and its products.

# THE CINCINNATI MEDICAL NEWS.

VOL. XIX. No. 218.  
Old Series.

FEBRUARY, 1886.

VOL. XV. No. 2.  
New Series.

## Original Contributions.

### On the Treatment of Certain Forms of Chronic Malarial Disorders.

BY SOLOMON SOLIS-COHEN, A.M., M.D.

Read before the Philadelphia County Medical Society.  
Reported for the CINCINNATI MEDICAL NEWS.

THIS paper does not aim at the presentation of anything very new or very startling. The affections to the treatment of which consideration will be directed have been so thoroughly studied and are so familiar to all, that such an attempt would be superfluous. A moderate experience, however, especially in dispensary practice, where one is more apt to meet with the cases of neglected disease, leads me to think that it will not be unprofitable to compare the effect of well-known methods of treatment in an every-day group of disorders. One often hears the expression: "Malaria is like charity, covering a multitude of sins." Now, while it may be true that an incorrect diagnosis of malarial poisoning is sometimes made in instances in which a more careful examination or a more skillful analysis of the morbid phenomena would lead to a different and correct conclusion, I am inclined to believe that such mistakes of diagnosis are very infrequently made by physicians of ordinary intelligence and education; and that one is more apt to overlook the connection of miasmatic infection with an obscure case of disease, apparently affecting this, that or the other organ, or group of organs, than to cry "malaria" as an easy method of dismissing a puzzling subject.

It is not purposed, however, at present to discuss, except casually, the question of diagnosis. Assuming that our patient has been examined carefully, and with due skill, and that the diagnosis of chronic malarial poisoning is correct, how shall he be treated?

The value of quinine is, of course, evident. But is this remedy the only one, or even the best one in all cases? No one will say that it is. Opinions differ, however, as to the exact indications for its use, or the best method in which to employ it. And so with other classical remedies. The most contradictory assertions as to their comparative value have been made; while general professional opinion has, nevertheless, assigned to a number of them positive anti-malarial virtues, and one practitioner resorts, with a confidence born of and justified by success, to a drug which another practitioner condemns as useless. In endeavoring to ascertain by promiscuous trials, without reference to the dicta of the text-books, the value of a number of the more highly esteemed drugs, there appeared to be a certain number of instances in which one remedy was superior to any of the others, and upon further observation it seemed that groups of cases, presenting certain general features in common, were thus therapeutically differentiated; so that by assigning any case to its proper group, in accordance with these features, it could be predicted which of the remedies experimented with would prove most beneficial in that particular instance.

The conclusions thus arrived at, I desire to briefly lay before the Society this evening, again premising that they are neither very new nor very startling. The drugs investigated were the cinchona alkaloids, salicin and its derivatives and compounds, iron, arsenic and iodine.\* I regret that my notes are not complete enough to enable me to present a statistical table, but that I can only give general results. Cases with profound organic disturbances, such as ascites or anasarca, great melanæmia, hæmatinuria, profound nervous derangement, etc., or in which splenic or hepatic enlargement was so marked as to call for treatment specially directed to that condition, are not included in these remarks.

First, as to quinine, which, as the best of the group, may stand for cinchona preparations in general: It will be

---

\* Eucalyptus, hydrastin and creosote are under observation, but I am not yet prepared to make any positive statements as to their utility.

generally conceded that the value of this drug is not so pre-eminent in chronic malarial disorders as in the acute, frank, intermittent or remittent fever. Its greatest applicability seemed to be in two groups of cases: 1. In those cases in which the manifestations—whether they were febrile or afebrile; whether they succeeded a neglected or insufficiently treated acute fever, or were chronic, and insidious from the outset—exhibited a more or less distinct periodicity. 2. In those cases, often subacute rather than chronic, and yet usually the result of a prolonged exposure to the exciting cause, or of a fresh exposure in a person, the subject of chronic malarial toxæmia;—that group of cases, including brow pain, some cases of so-called dry pleurisy, etc.—which are usually termed “masked malaria” or “dumb ague.” In the first group of cases, given in sufficient doses during the twenty-four hours preceding the expected paroxysm, quinine acts as an efficient preventive; but it is not to be depended upon to remedy the underlying toxæmia, which prolongs the time during which the periodic outbreaks regularly recur. For if we intermit its use, we will find that after one or two paroxysms have been missed the outbreak will again occur, even though the violence may be moderated or the character of the symptoms modified. In other words, quinine, in chronic malaria, is a prophylactic against exacerbations rather than a remedy. In the second group of cases, quinine employed as in ordinary intermittents or remittents, to “break up” the attack, and continued in small doses, daily, for three or four weeks, with a full dose in anticipation of each seventh day, or if the periodicity be differently manifested, each third or sixth or ninth day (as the case may be), will sometimes bring about complete recovery. If, however, recovery is delayed beyond four weeks, the cases then seem to do better under some one of the other remedies, with, perhaps, a full dose of quinine occasionally, in anticipation of an expected paroxysm, as in the first group.

It was long ago observed that in some cases of masked intermittent, without distinct periodicity, one of the first manifestations of approaching recovery was that, under the influence of a cinchona preparation (this was even before the days of quinine), the vague pains and aches would suddenly give place to a pronounced fit of ague, with chill, fever and sweat, more or less classically regular. This fact, in connection with the relapse noticed on withdrawing



quinine, as just mentioned, suggested the following plan of treatment: To give quinine, either alone or in combination with one of the other remedies deemed appropriate, and to continue the use of the drug for about a week, or until some improvement should be manifested; then to stop medication and wait for the relapse. This would usually come either in the form of chilliness, followed by fever, and, perhaps, sweating; or else one of the symptoms previously complained of would manifest a periodical aggravation. By carefully noting the periodicity, it then became possible to employ quinine as a prophylactic, in advance of the paroxysm, either by divided doses during twenty-four hours, when the periodicity was tertian, or longer, or by one or two decided doses, four hours or eight and four hours, respectively, in advance, when the manifestations were quotidian; arsenic or other drug being given in the intervals.

According to my own experience, the most effective salt of quinine is the so-called bimuriate of quinia and urea, which I was led to employ by learning of Prof. Bartholow's high opinion of its virtues. I have elsewhere published some cases illustrative of its value in acute remittent fever and in a case of prolonged and severe intermittent fever, in which quinine sulphate in doses of sixty grains *per diem* had only succeeded in changing the type of a disease from a double quotidian to a single quotidian. The cases herewith briefly cited are illustrative of its virtues in chronic cases, and also go to confirm the opinion already expressed, that quinine in these cases is a prophylactic, but not a remedy. The bimuriate of quinia and urea is perfectly soluble in its own weight of water, and hence adapted for use hypodermically. The objection to it is, that unless extreme care is taken not to allow a drop of the liquid to touch the skin, and, sometimes, in spite of every precaution a very sore arm, or even an abscess may result. It is good practice to paint the arm at and around the point of puncture with tincture of iodine.

Case I. was of a young man, living near the Delaware River, and working along the wharves at Port Richmond. He had had repeated attacks of chills and fever for ten years; exhibited marked malarial cachexia, the spleen, however, being but slightly enlarged. For about a month he had been suffering with irregular chills, sometimes followed by fever, and for two weeks had had daily chills. He was seen during the cold stage, about 2 P. M.; temperature 100°.

An injection of fifteen grains of bimuriate of quinia and urea was given. The hot stage was averted, and the patient remained perfectly well for six days. He then had another chill, and an injection of ten grains of the same drug kept him well for a week, when he had a chill as before. He was then placed upon salicylate of cinchonidine and iodide of arsenic, and during three weeks longer that he remained under observation, had no further chill. From the fact that he did not return, I presume this subacute exacerbative attack was completely checked. Of course he was not under treatment long enough to rid him of his cachexia.

In the second case, very similar to the above, but with marked enlargement of the spleen, the quotidian intermittent, for which the patient sought relief, had lasted three weeks. One injection transformed it into a quartan, and the next prevented any further chill for a week. The patient was then placed upon salicylate of cinchonidine and arsenic, and is improving under this treatment.

While on the subject of the bimuriate of quinia and urea I would refer to a case recently treated at the Jefferson Hospital Medical Clinic. A man, while in the waiting room was seized with the cold stage of a tertian intermittent, that he had had for two weeks. His temperature at the time of the injection of fifteen grains of the bimuriate of quinia and urea was  $105^{\circ}$ . He had no subjective fever, and went home happy half an hour after the injection. He returned on the next chill-day with a normal temperature. Nothing was done, and the day after the next chill-day, that is, the sixth day from the day of the injection, inclusive, he returned, and had a slight shiver, his temperature being  $99^{\circ}$ . After a second injection he remained free from chill for two weeks. He was then placed upon cinchonidine salicylate, and recovered without any subsequent paroxysm. This man would have recovered, doubtless, under the ordinary quinine treatment. I only cite the case in illustration of the rapid and continuous effect of the hypodermatic injection of the drug in question, and as a contribution toward data for determining the manner in which the cinchona alkaloids prevent the recurrence of malarial paroxysms.

In the cases so far spoken of, the malarial element is pronounced. There are, however, other cases, where an element of doubt enters into the diagnosis, but which are, I think, properly called chronic malaria. We will now speak of them. In cases where the patient is hard worked,

ill fed, run down, exposed constantly, if not to malarial infection, to deleterious surroundings, and especially if there be exhibited a tendency toward the establishment of anæmia; in other words, in those cases wherein vital depression seems to be the most evident effect of the poison; whatever treatment be adopted, iron forms a valuable adjuvant. A formula which has been used with success by Dr. Rosh Leaman, my predecessor at the Jefferson Hospital Clinic, consists of sulphate of cinchona, dilute nitro-muriatic acid and tincture of the chloride of iron, in elixir of orange.

My personal preference is for the iodide of iron, at first in small doses, rapidly increased to as large doses as the stomach and intestines will tolerate, and then gradually diminished. In many of these cases, iodine seems to replace quinia and do away with the necessity for any cinchona preparation. In other cases, Peruvian bark, or some of its alkaloids, must also be used, in such doses and at such intervals as the nature of the paroxysms may indicate.

A pill of arsenic and iron, or a mixture of the tincture of chloride of iron with Fowler's solution, is often of great service. In a case of great interest diagnostically, at the Hospital Clinic recently, Prof. DaCosta prescribed tincture of the chloride of iron in combination with solution of chloride of arsenic. Arsenic, however, appears to find its greatest usefulness in cases which, like the one just referred to, do not present a typical picture of malaria; where the disease is manifested in vague neuralgias, headaches, attacks of nausea, even vomiting, without adequate cause, such as dietary indiscretion or gastric disease; in "nervous dyspepsia;" in simulated phthisis; in cases where the patient, even when well nourished and apparently robust, seems indisposed to exertion, either mental or physical; those cases of chronic masked malaria which have been termed "neurolytic;" in a word, in those cases where the effects of the malarial poison seem almost to have become localized in the nervous system. It is, however, also of great utility in cases of neglected, long-continued intermittent fever. At the Jefferson Hospital Clinic, Prof. DaCosta is in the habit of prescribing Fowler's solution in such cases, after the paroxysms have been brought under control by large doses of quinine, continuing moderate doses of quinine every morning.

When the pains and aches complained of are located in muscles—favorite seats of such location seeming to be the back of the neck, the shoulders, especially the right shoul-



der, and the lumbar region—and when they are rather rheumatoid than neuralgic in character, such cases, indeed, as one sometimes sees treated as chronic muscular rheumatism, the salicin group of preparations are of decided benefit. Cinchonidine salicylate, combining, as it does, salicylic acid and a cinchona alkaloid, has seemed peculiarly valuable. It has also appeared superior to quinine sulphate, in cases marked by vague chilly sensations and irregular febrile manifestations, yet lacking the frank chill, with its subsequent stages of fever and perspiration. These cases can sometimes be clearly differentiated from the former group (nervous cases), but often the two are mingled. In these mingled cases, a combination of arsenic and cinchonidine salicylate is often more effective than either drug alone.

Iodine, which, according to some observers, especially Russian and Anglo-Indian physicians, is of the highest value, even in acute cases, and according to others is of no value whatever, has seemed to be of benefit in all groups of chronic cases, and particularly in those which, however the phenomena may be manifested, are evidently the result of repeated attacks of intermittent or remittent fever; in other words, those usually classed as cases of malarial cachexia. It is not efficient, however, if employed alone. In those cases where quinine is used to break up the paroxysms, iodine serves a good purpose in the intervals. It may be used in the form of tincture or of compound tincture, or of compound solution, given in water, in simple elixir, or in elixir of cinchona, or in tincture or compound tincture of cinchona, when the influence of bark is desired. In cases where arsenic or iron seems to be indicated, better results have sometimes appeared to follow the use of the iodides of these metals than that of any other preparations. Iodine in metallic form, or in aqueous or alcoholic solution, can, however, be mixed with an appropriate arsenical or chalybeate preparation, if that be preferred to a definite chemical combination. At the Jefferson Hospital Clinic, the iodide of ammonium was introduced by Prof. Bartholow, with gratifying results. In one case, a subacute exacerbation of long standing malarial disease, he prescribed a combination of iodide of ammonium with Fowler's solution, and in addition thereto, pills of cinchonidine salicylate. A pill which I have employed with apparent good results, consists of cinchonidine salicylate five grains, and iodide of arsenic  $\frac{1}{24}$  to  $\frac{1}{12}$  grain, three times a day.



In all cases, it is, of course, taken for granted that proper hygienic and dietetic measures should be instituted, and that the activity of secretory and emunctory functions should be preserved and stimulated. Summing up, the points set forth in a desultory way in this communication may be recapitulated as follows:—

I. That quinine salts are of greatest value in those cases of chronic malaria showing a distinct periodicity, and especially if there be a febrile paroxysm; and that in such cases their chief value is prophylactic, rather than curative. That the administration of quinine until relief is manifested, and then the withdrawal of the drug, will sometimes bring out a periodicity otherwise masked. The bimuriate of quinia and urea, hypodermatically, is the preferable salt in acute or subacute exacerbations occurring in the subjects of malarial cachexia.

II. That in cases where the patient is much run down and exposed to unsanitary conditions, iron should be part of the medicinal treatment.

III. That where the most prominent symptoms are connected with the nervous system, including apparent pulmonary, cardiac, intestinal or gastric troubles, arsenic is indicated.

IV. That where the most prominent symptoms are rheumatoid or myalgic in character, salicin, or some of its derivatives or compounds, is of advantage; cinchonidine salicylate, by preference, in order to obtain the anti-malarial virtues of the cinchona alkaloid. Cinchonidine salicylate is also of use in maintaining an effect produced by quinine, after the withdrawal of that drug, and is superior to quinine where the paroxysmal manifestations are vague and irregular.

V. That iodine is of some benefit when administered alone, and of decided benefit when combined with other remedies.

#### DISCUSSION.

Dr. J. C. Wilson.—In this city we occupy a topographical position which makes us liable to malarious influences and to outbreaks of malarious disease. This is shown by historical experience. Half a century ago frank malarial affections, intermittent and remittent fevers were very common. I think, from my own experience and that of others, that such frank cases must now be uncommon. In regard to the banks of the Schuylkill and of the Delaware, while

acute frank cases are of common occurrence, both above and below the city, I think that it is rare to find such attacks developing in those who live near these rivers in the city, who have not been exposed to malarial affection in some other locality.

I, however, do see a large number of patients suffering with diseases which are characterized by more or less periodicity, evidently of malarial origin, in which the so-called antiperiodics are curative.

With reference to treatment, I would say that where periodicity is marked, I believe that the alkaloids of cinchona are to be preferred. Notwithstanding the relative high cost and the occasional difficulty of administration of sulphate of quinine, I believe that it, in the end, is really the least expensive and the most satisfactory remedy. This is true only of cases where periodicity is well marked, and while it is well marked. As soon as this periodicity is lost, or there is only a wavelike approach to periodicity in the recurrence of the symptoms, we must fall back on other remedies. I then use either potassium or sodium arsenite, or arsenious iodide. I prefer to give arsenic alone, beginning with a moderately full dose, getting some evidence of the physiological effect, then diminishing the dose, and if there is indication for the use of iron, alternating the arsenic with this remedy. With the bimuriate of quinia and urea hypodermically, I have had no experience except in one unfortunate case in which a serious sore resulted.

Dr. Collins.—I have been much interested in the paper. I think it important to discriminate between malaria of the swamps and malaria of the city. I think that we shall have to modify our ideas of malaria somewhat. The malaria which I saw along the Potomac and James Rivers and in camp differed much in intensity from that which I see here.

I have been much interested in the treatment, for that agreed with my experience. Two years ago I began using the bimuriate of quinia and urea. I find it a desirable remedy.

Dr. Watson.—For more than fifteen years I have practiced in the western part of the city, following the banks of the Schuylkill from Market Street to beyond Callowhill. For the last five years I have not seen a case of clear intermittent fever in any person residing and continuing to reside in that neighborhood. Where such cases have occurred, the patients have been exposed in places notoriously subject

to that disease. I have met with remittent fever with great frequency, so much so that some time ago every case of labor that I delivered in the neighborhood of the Schuylkill developed remittent fever. These were all cured by quinine.

In regard to chronic malaria, I have seen it frequently arising in people living in damp houses and exposed to bad air, especially in persons returning from the country or from the seashore. The cases of a rheumatic type commonly developed in those returning from the seashore. In these cases, salicin has seemed to act more promptly than the salicylic acid compounds. Salicin and arsenous acid have seemed more efficient than quinine.

In 1865-66 the attempt was made in the Episcopal Hospital to treat intermittents with chloroform. It was also tried on remittents, but failed. In chronic intermittent fever, the best treatment seems to be iodine and arsenic. The combination of iodide of iron and arsenous acid is often sufficient, without resorting to anything else. In chronic remittents, strychnia, quinine and piperine answer very well.

Dr. Wm. T. Taylor.—In this city I have noticed that where large building operations were going on, and cellars being excavated, and the subsoil turned up and exposed to the sun, malarial cases would develop.

My treatment has generally been large doses of quinia, and, as a rule, I have not failed. I give from fifteen to twenty grains, producing buzzing in the head. I believe that one large dose will do more good than small doses from time to time. Although afterward I may continue the remedy in moderate doses, yet on each septenary I give a full dose. Where they are indicated. I also use arsenic and iron.

Dr. J. W. Holland.—From what I have heard to-night, I should infer that I have come from a more malarious region than you have here, although my personal experience had led me to believe that Philadelphia was malarious, as well as other places.

In regard to diagnosis, I think that the position that periodicity is the best marked characteristic, is a safe one. Of course this is not absolute, for periodicity marks many forms of disease, and, in fact, it marks health. In the West and South, we find that diseases which are not at all allied to malaria show this periodicity very early; and in most acute cases occurring in these regions, some indication for a large dose of quinine will be found before the case has termina-



ted. Experienced practitioners are apt to use thirty grains of quinine within twenty-four hours, at the beginning of such diseases as pneumonia, rheumatism, etc.

Dr. James Tyson.—I wish to say a few words with regard to the hypodermic use of quinine, in obstinate malarial affections. I formerly feared to use the salt in this manner, because of a horror of abscesses, and never did use it freely until a year ago, when I was forced to try it, by the failure of other methods of administration to break up an intermittent of one month's standing. I found by experiment that one drachm of water would dissolve  $7\frac{1}{2}$  grains of the bisulphate of quinia. The pharmacopœia says it is soluble in the proportion of 1 to 10, the sulphate 1 to 740, the hydrochlorate being soluble in the proportions of 1 to 34. I began the treatment by the injection of this quantity ( $7\frac{1}{2}$  grains) night and morning. In two days the paroxysms of chill and fever disappeared, and did not return. There was no more irritation than follows an ordinary hypodermic injection. Since then I have used it more freely, not only in malarial cases but in other cases, especially where an antipyretic effect was desired. I have never had an abscess from it.

Dr. Meigs.—At the Pennsylvania Hospital, where we have patients from all parts of the country suffering with malarial diseases, I have found that it is seldom necessary to give more than sixteen grains in twenty-four hours, and this quantity is administered in four-grain doses. When the diagnosis is positive that the intermittent disease is of malarious origin, this dose of the drug rarely fails to arrest the paroxysm, and the patient seldom has more than one chill after coming into the hospital. The circumstances are different, to be sure, when the patient is removed, for the time, at least, from the malarious influence, from what obtained in more highly malarious regions.

Dr. Carl Seiler.—There is one point in regard to the administration of quinia which might be mentioned. I have found the taste of quinine can be almost entirely disguised by mixing it with an equal quantity of extract of glycyrrhiza and powdered chocolate. This is placed, dry, on the tongue, and washed down with a mouthful of water. About the only taste noticed is that of chocolate. Dr. Cohen is, I believe, in the habit of giving quinine in strong, black coffee.

Dr. S. S. Cohen.—I have little to add, but in reply to Dr. Wilson I would say, with reference to the analysis of cases, that this has been more the force of repeated observa-



tion than of preconceived theory. My object was to try to find out why it was that a remedy which was of service with one man failed with another; and giving all doses promiscuously, it was at first a mere matter of accident which individual received a particular remedy. The system of classification which grew out of happy accidents is merely suggestive and not intended to be adhered to on strict lines. I believe the surroundings, and physiological and pathological antecedents of the patient, greatly influence the particular train of symptoms developed; and thus it is, after all, only suiting our remedy to the patient as well as to the disease. Had I thought so much time would have been allotted to this subject, I should have endeavored to have brought forward facts in support of the suggestions presented.

The difference between malaria of different localities is quite marked. Though I have not practiced in the West or South, I have seen many instances of marked malarial cachexia in the practice of my preceptor, in patients who have been sent to Philadelphia from the West and South, for advice in other connections. At the Jefferson Clinic our malarial patients come from "The Neck," from Kensington and Richmond, and Manayunk, from New Jersey, Maryland, and Delaware.

I recall a case from Delaware, in private practice, in which phthisis was suspected. Examination of the lungs revealed no physical signs of such a condition. There was feeble respiration, the patient had a little cough, was run down, and anæmic. On studying the case a marked periodicity was noticed. The patient was ordered to a mountainous region, and while there developed a frank intermittent. This yielded to quinine. The patient returned to the city and was again seized with irregular manifestations, and under salicylate of cinchonidine and iodide of arsenic, is recovering.

I have been much interested in the remarks of Dr. Holland and Dr. Tyson with reference to the hypodermatic injection of quinine. I have had no experience with the bisulphate hypodermatically. Before resorting to the use of the bimuriate of quinia and urea, I had seen it successfully used, as stated by Dr. Collins, in the German Hospital. I do not use it as a routine measure, or where the patient can be readily brought under the influence of quinine by the mouth. Used in the manner I have described, with the application of iodine around the point of puncture, I have thus far been lucky enough to escape ulcers, though sore arms resulted in

the first two cases in which I employed it. I have seen abscess, however, even when due care has been taken. For poor people, the difference in cost between a long course of quinine sulphate and a few injections, costing less than ten cents each, of the bimuriate, is quite an important consideration.

---

## Translations from Our Foreign Exchanges.

---

Translated for MEDICAL NEWS, from the French, by Dr. Illowy,  
Cincinnati, Ohio.

---

*Extra cardiac bruits in general, and gastric bruits, rhythmical with the heart, in particular—A contribution to the diagnosis of pericardial adhesion.*

---

BY M. FRANCOIS FRAUCK.

---

Reported to the Societe de Biologie.

---

I. *Definition, division, signification.* There is described under the name of *metallic resonance* of cardiac bruits, the modification which bruits undergo when resounding in a cavity filled with air or gas adjacent to the heart. The valvular sound, thus reinforced and modified, gives the same sensation as is obtained by percussing with the finger the back of the hand flatly applied to the pavilion of the ear; certain stethoscopes, with membranes, employed in auscultation of the heart, give the same sensation and are for this reason absolutely defective instruments.

All others are superadded bruits, *which are produced outside of the heart*, in a cavity filled with gas or air and possibly containing liquids of variable consistency. These have nothing cardiac in them except the rhythm, and have no relation at all to the bruits proper of the organ upon which they superimpose themselves, which they do not replace and which they sometimes mask by reason of their predominant intensity.

The first are *cardiac bruits* modified in their timbre, the latter constitute the varied group of *extra cardiac murmurs*.

In this group we find souffles (blowing sounds), bubbling sounds (bruits bulleux), fine or constituting veritable gurgling, splashing sounds, tinkling, etc., but, whatever be the

acoustic variety to which they correspond, the sounds which we are now considering have all this characteristic, that they originate outside of the heart and are rhythmical with its movements, most frequently with its systole; it is thus that the extra cardiac *souffles* (blowing sounds) have their origin in the layer of lung immediately in contact with the anterior surface of the heart; the *bubbling sounds* are produced in a cavity containing a liquid, most frequently mucous, and air or gas.

All these extra cardiac bruits have been the object of continuous studies on the part of M. Potain; the various theses or memoirs of his pupils (Choyan, Cuffer, etc.) contain an exposition of the clinical facts and of the theories by which we may account for them. Thanks to these works, the pulmonary and pleural bruits, rhythmical with the heart more especially, have become well known; but so far as I know, no attempt has been made to study the bruits of this species which are produced in the stomach. The greater part of the observations which make mention of a gastric bruit coincident with the cardiac systole, are cases of metallic resonance of cardiac bruits, and not of veritable extra cardiac, rhythmical with the heart, but independent of that organ. We can easily convince ourselves of this by perusing a memoir, published a few years ago, on two cases of metallic bruits of the heart by Dr. Korczynski (*Wiener Med. Presse*, No. 47, 1879); the facts of Laennec (observation made on himself), of Skoda, Dechambre Leichtenstein, all evidently have reference to cardiac bruits with metallic resonance, observed in subjects with dilated stomachs, and not to a series of extra cardiac bruits, properly so-called.

To the diagnosis and mode of production of *extra cardiac bruits due to the stomach*, I desire to call your attention. I have observed several cases, but this last case reported here in this paper I have been enabled to study more particularly. The analysis of the peculiarities presented by this patient will show, I believe, which attaches to the distinction between bruits exterior to the heart, but rhythmical with its movements, and abnormal intracardiac or pericardiac sounds; it will lead to an examination of the question always pending, that of the diagnosis of pericardial adhesions and of how much may be attributed to them in the production of this category of abnormal sounds.

II. *Résumé of the Observation.* The patient in question, a vigorous man of forty-five years, non-rheumatic, a gross



eater, not given to alcohol, but neuropathic and dyspeptic, was sent to me recently as one affected with a malady of the heart.

He complained of a certain difficulty of respiration which was augmented after meals, and which diminished as he loosened the constriction produced by his vest and pantaloons; real pain he did not complain of; what troubled him mostly was that, since his breathing had become short, he heard a jerking "musical" sound, he said, which he attributed to his heart, and which he knew was considered a sign of cardiac disease. At no time since many years had he been compelled to take to his bed; he knew of no accident in the past that could have been referred to an acute thoracic affection, or to a rheumatic or gouty attack.

An examination of the heart enabled us to verify a bruit, not at all musical, but *gurgling*, if one may be permitted to so say; one would have said that a viscous liquid was churned with gas at each ventricular systole. The maximum of this bruit, very intense, was over the epigastric region, but it was also heard at a great distance from this central zone, over the thoraco-abdominal walls. Behind it was still found, but markedly attenuated. Removing the ear from the breast of the patient, one ceased to perceive the bruit at a distance of about 30 centimeters.

The heart very regular, but frequent (92-100) hypertrophied and lowered, gave no sensation of systolic impulsion in the lateral costal region; it was only in the pit of the epigastric region, and more particularly in the angle formed by the xyphoid appendage and the costal cartilages of the left side, that the impulse of the heart was perceived. On palpitation the beatings of the heart did not present the character of brisk hardening usually furnished by the ventricular systole; and in fact, a cardiographic examination very soon showed that *the systole coincided with a brisk retreat of the wall*, the diastole with a projection forward of the soft parts in the epigastric region.

Two principal facts were disclosed by this exploration: 1st. The heart produced a bruit rhythmical with its systole, a very intense gurgling sound. 2d. The cardiac impulse was diastolic.

Without entering into the details of the various examinations made of the patient at various times, I shall give the reasons which have induced me, by exclusion, to attribute to the stomach the rhythmic gurgling sound. What leads me



to believe that the diastolic impulse is due to cardiac adhesions ; and lastly, how the gastric bruit may be caused by the pericardial adhesion.

III. *Differential Diagnosis.* 1st. The effusions of gas or liquid into the pericardium being accompanied by bruits analogous to those which we have just described, the hypothesis of a pericardial effusion is therefore one that should be first examined : the general condition of the subject, the absence of all febrile reaction, present or past, form a strong presumption for discarding such a diagnosis ; still, by reason of the latent condition presented by some forms of pericardial effusion it deserves to be examined more critically. An examination of the pericardial region did not disclose any inferior dullness, nor tympanitic sound in the upper part ; no bulging ; no modification in the character of the heart's beat under the influence of a change of position. The arterial pulse was found normal, at least with more than a medium amplitude ; the veins of the neck alone presented several abnormal phenomena, which, nevertheless, did not concord with the hypothesis of pericardial effusion, but rather with that of a cardiac adhesion, as we shall see further on. For all these reasons the idea of a *pericardial* origin of the abnormal bruit must be abandoned.

2d. I shall not insist upon the negative signs of a mitral lesion, although the time of apparition of the bruit, in full systole, might lead us to suppose a left auriculo-ventricular insufficiency ; the abnormal bruit had none of the acoustic characteristics of mitral murmurs ; it had neither the seat nor the propagation ; the pulmonary and general circulation did not show any of the difficulties that usually accompany a mitral lesion ; lastly, the characteristics of the *heart's beats* were absolutely different from those found in a mitral affection.

3d. It is hardly necessary to detail the reasons which permitted us to eliminate in this case, at the same as the diagnosis of mitral insufficiency, also that of the aortic stenosis. The thought of such a trouble could not even arise, by reason of the seat and character of the superadded bruit, absence of its arterial propagation, the state of the pulse, etc.

4th. Finally the hypothesis of the sole anomaly of the heart, which may be accompanied by a very intense systolic bruit, an interventricular communication was not borne out by the examination.

The pericardium and heart being therefore excluded as

the seat of origin of the abnormal bruit, it must be attributed to the influence of the beats of the heart on the walls of an adjoining cavity containing gases and a liquid; that is to say we must seek in the *lungs*, the *pleura* or the *stomach* for the origin of this gurgling sound, which is evidently extra-cardial.

5th. There have been frequently noted *cavernous* bruits in the lungs or pleura, more or less characteristic of gurglings rhythmical with the heart and due to the movements impressed by the cardiac beats on the liquid and gaseous fluids contained in a pulmonary cavity in a bronchial dilatation, in the pleura affected with hydro—more especially with pyopneumo-thorax; have we here in the case before us a bruit of this kind? It will suffice for the abandonment of such a hypothesis to affirm the absence of any abnormal pulmonary or pleural cavity; a simple examination suffices to establish the integrity of the respiratory apparatus. There were not even mucous râles in the bronchi that might perhaps become rhythmical with the systole of the heart. We are therefore compelled to refer to the stomach, the bruit of which we have not found the cause, either in the cardio-pericardial apparatus or in the respiratory tract.

6th. We must recall here that the patient himself directed the attention to the stomach; he suffered from dyspeptic accidents more particularly since the last few weeks, and respired with difficulty if his stomach was not free to distend itself after a repast; even under these conditions a certain degree of shortness of breath persisted under the influence of movements. There were therefore good reasons already for supposing functional gastric disturbances sufficiently accentuated; a local examination confirmed this hypothesis. Besides the epigastric protrusion giving a tympanitic sound to percussion, it was easy to determine a splashing sound by lateral succussion; the gastric sonority mounted very high to the left; in a word, there existed in our patient all the physical and functional signs of a marked dilatation of the stomach. The stomach could therefore very well, under these abnormal conditions, be the seat of the origin of the bubble bruit, rhythmical with the heart, a bruit having its maximum in the epigastric region, in the neighborhood of the region where the ventricular impulse occurred; it was logical to admit it and to attribute the systolic gurgling to the collision of the liquids and gases which distended the stomach.

But this was only a hypothesis which could be easily verified. Catheterization of the *œsophagus* with a large tube of Fancher, brought no evacuation and caused no modification of the bruit; but as soon as the tube was introduced into the stomach and then inclined outward, there was an abundant outflow of liquid and alimentary mucus, with issue of a great quantity of gas, after having been allured with a small quantity of diluted Vichy water; the bruit was immediately modified, ceased almost immediately to be perceptible to the patient, and became very much attenuated to the ear, applied to the epigastrium, to the point of almost complete disappearance during inspiration. I could not find a trace of it, except at the moment of inspiration when the diaphragm in relaxation rendered more easy the transmission of cardiac influences to the contents of the stomach.

The gastric origin of the extra-cardiac bruit was thus established. The counter-proof made by the restoration of liquid (lukewarm Vichy water) to the stomach, just evacuated of its contents, was not successful as I at one time thought it would; the bruit, which persisted, certainly became slightly stronger, but it did not resume the gurgling character it had presented before. There is, however, nothing surprising in this, if we reflect that the liquid removed by the sound was viscid and mixed with gas, whilst that which we introduced into the stomach was of aqueous consistency and held no gas in solution.

IV. *Manner of production of extra-cardiac bruit of gastric origin.* The mechanism of extra-cardiac bruits in general is evidently the same as that of gastric bruit rhythmical with the heart, superimposed upon its own proper sounds and entirely distinct, as has been said at the outset, from the simple metallic bruit caused by resonance. We have, therefore, but to discuss, after having summarily recalled the general theory, the special conditions which permit of the production of this variety of bruits in the cavity of the stomach.

1st. The first hypothesis which presents itself to us, to explain how the movements of the heart can, in certain cases, produce in the neighborhood of this organ sounds rhythmical most frequently with its systole, is the following: The ventricular mass implants with each of its contractions a brusque shock on the parietes of the adjacent pulmonary layer, or of the distended pleural sac, or, finally, on the

parietes of the stomach, through the intermediary of the diaphragm. It is in consequence of this shock that the air in the layer of lung is suddenly compressed and displaced: whence the short blowing sound (short bruit de souffle); the same influence acts upon the liquid and the gases of the pulmonary, pleural and gastric cavities, and thus produces a liquid bruit of variable resonance according to the nature of the liquid put in motion.

This hypothesis must be abandoned in the presence of positive facts furnished by direct experiments upon animals and an attentive examination of certain clinical particulars.

It is not to the *shock* of the heart upon certain depressible parietes that the different extra-cardiac systolic bruit are due. It is, on the contrary, due to the sudden *retreat* which the ventricular mass undergoes in evacuating its contents into the arteries. Summary experiments have demonstrated to Vort, to Lossen, to Ceradini, to Laudois, etc., that the air contained in the trachea-bronchial tree undergoes, at each ventricular systole, a sudden repulsion from the exterior toward the interior; Charles Buisson has already proven (1882) by registering the movements of the tracheal column of air, that the sudden diminution of the volume of the heart at the moment of systole, is marked by an entrance of air into the breast. I have myself somewhat later (1) resumed with later details the study begun by Buisson, Ceradini, and others, and have insisted upon the importance of this notion from the point of view of the mode of production of extra-cardiac bruits.

The extra-cardiac bruits are, therefore, the consequences, not of the systolic *shock*, but of the retreat of the ventricular mass in consequence of the rapid diminution of volume; this is the interpretation which Prof. Potain has given, making thus the clinical facts and the results of experimentation agree; he calls particular attention to this, that the bruit de souffle (blowing murmur), for example, is not produced at the moment of the debut of the shock, but in the middle of the ventricular systole, precisely at the instant when the ventricles evacuate their contents (*souffles meso-systoliques of Potain*).

This is, summarily, the mechanism of these bruits; let us

---

(1) Compte Rendu Société de Biologie 1877. Travaux du Laboratoire de M. Marey 1877.



now see if this theory can be also precisely applied to the gastric bruits rhythmical with the systole.

In the normal conditions these bruits never exist, contrary to what is the case with the pulmonary bruit de souffle, which may occur in perfectly healthy persons; some accidental condition must, therefore, intervene which favors and determines their production.

This essential condition is dilatation of the stomach with flaccidity of its walls and an accumulation of liquid and gas. We must, however, remark how rare such bruits are despite the relative frequency of gastric dilatation.

V. *Probable influence of pericardial adhesions on the production of extra-cardiac bruits.* Is a supplementary condition necessary that the heart be in a position to produce this bruit in question? Shall we find this condition precisely in the exaggerated importance of the systolic *retractions* which accompany pericardial adhesions?

This is the question I put to myself, in presence of the case, the details of which have been given above. If the response was affirmative, then, perhaps, we would have a new indication for the diagnosis of pericardial adhesions, so difficult to fix, or, at least, it would lead us to suspect its existence and to seek for its symptoms. It has been already supposed (Riess) that the metallic resonance of the sounds of the heart in a dilated stomach were a good sign of cardiac symphysis, and that because in one case cardiac adhesions were found in a subject who during life had presented the metallic resonance. But it is very clear that from this one sign alone we can not establish the diagnosis of cardiac symphysis in more than by the discovery of an extra-cardiac bruit of gastric origin. What seems to me more logical is to accord a real diagnostic importance to such a bruit when, on the other hand, we find, as in our patient, direct and *positive* signs of pericardial adhesion.

You will recollect that apropos of the examination of the circulatory apparatus, I insisted upon this fact, that the epigastric cardiac impulse was coincident with a *retreat*. We have here a *retreat of the parietes of the heart itself, a veritable negative reversed pulsation*, and not merely depressions of the thoracic and epigastric parietes produced at a distance from the heart by periventricular aspiration. This fact, demonstrated at the level of the pit of the stomach, on a heart evidently hypertrophied with a point very much depressed,

constitutes already a serious presumption in favor of the existence of a pericardial adhesion.

On the other hand, the veins of the neck, moderately tense, undergo with each ventricular systole a sudden depression, which is immediately followed by a distension lasting till the next systole; it is, in one word, an exaggeration of the normal jugular pulse due to an augmentation of systolic periventricular aspiration.\*

If the local and distant signs which I have just mentioned lead to a diagnosis of pericardial adhesion, the production of a gastric bruit by *cardiac retraction* conducts equally thereto. This bruit is, in fact, easily explained by the augmentation of the effect of periventricular aspiration.

In this way the existence of pericardial adhesions will explain the production of bruit, and a discovery of the latter lead, as it has done in this case, to a search for adhesions of the pericardium.

---

## Selections.

---

### Physiological Research in Regard to the Action of Morphia and Atropia.

---

(Read before the Louisville Medical Society, Dec. 17, 1885, by Martin F. Coomes, M. D., Prof. of Physiology, and Clinical Lecturer on Diseases of the Eye, Ear, Nose and Throat.)

---

THE subject of atropia as an antidote in opium poisoning has been of the greatest interest to me, because of the possibility of atropia being the true antidote.

For the last two years I have been investigating this subject with a view of satisfying myself as to the antagonistic properties of opium and belladonna. My experiments have been confined to the lower animals—principally dogs, with an occasional rabbit or pigeon. The first of these experiments was made in April, 1883. The animal was a dog, rather below the medium size of an ordinary cur. Two grains of the sulphate of morphia were injected hypodermically at 3 P. M. In five minutes slight emesis occurred, and in ten minutes the respirations were thirty per minute. At

---

\* See the articles I have published "*On the Movements of the Veins of the Neck.*" *Gazette hebdomadaire*, March and April, 1882.

the end of twenty minutes the respirations were from 135 to 150 per minute, and in the language of one who was present, it looked like the animal would "breathe itself to death." In twenty-five minutes respiration had fallen to 95 or 100 per minute.

At 3:50 P. M. another grain of morphia was injected hypodermically. In five minutes the respirations were reduced to 73 per minute, and in fifteen minutes they were reduced to 48 per minute.

At 4:23 P. M. another grain of morphia was injected hypodermically. At the time of this injection the respirations were regular and 36 per minute. The skull had been trephined before any morphia was injected, the animal having been etherized for that purpose.

Within ten minutes after the first injection of morphia the brain became violently congested, the veins being particularly full of dark looking blood. At 4:45, or eighty-five minutes after the first injection, the animal was profoundly narcotised and completely insensible to all pain with one exception, which I will mention further along. At this time (4:45) 1-40 of a grain of the sulphate of atropia was injected hypodermically. In one minute the heart's action was materially increased in force, with increased arterial circulation in the brain, and diminished venous congestion. This change was so marked as to be noted by the casual observer.

This single injection of atropia so revived the animal that I determined to inject more morphia, and at 5 P. M. six grains of morphia were injected hypodermically. This was soon followed by decided congestion of the brain; the veins were much distended, and the cerebral mass rose up into the opening in the skull, and slight hemorrhage occurred.

Sixteen minutes after the last injection of morphia 1-20 of a grain of atropia was injected. The effect of this was only slightly noticeable. Respirations at this time (5:30) were 20 per minute.

At 5:40 P. M. 1-20 of a grain of atropia was injected. This was not followed by any apparent change in the animal's condition.

Up to this time the dog had received ten grains of morphia and  $\frac{1}{8}$  of a grain of atropia, or 1-80 of a grain of atropia for each grain of morphia. It must be remembered that this animal was etherized before he had any morphia, which may have modified the action of one or both of these drugs. The animal, I believe, would have recovered, but his head

was so mutilated from the effects of the trephining that I killed him to rid him of his suffering which must necessarily follow.

One of the most notable occurrences in this observation was the extreme sensitiveness of the *dura mater*. Previous to this I had supposed that the *dura mater* was almost devoid of sensation, but on this occasion, notwithstanding the fact that the animal was so profoundly narcotised that I removed the integument from the surface of the skull without his evincing the slightest pain, yet when I reached the *dura mater* evidences of the most intense pain were manifested. I finally succeeded in removing a button from the skull about three-fourths of an inch in diameter. After the animal had become perfectly quiet and so insensible to pain that I could stick a knife into the body almost anywhere without causing him to move, yet the slightest touch of the *dura mater* would cause him to move and give evidence of pain.

The second dog that was subjected to this experiment weighed about thirty-five or forty pounds. At 8 A. M. I gave him eight grains of the sulphate of morphia by the mouth. This made him very drowsy, but did not keep him from walking without assistance.

At 4:20 P. M. of the same day I gave him four grains of the sulphate of morphia hypodermically, which made him very sleepy, but not sufficient for my purposes. At 5 o'clock I gave him four grains of morphia hypodermically. At five minutes to 6 o'clock the animal was so profoundly narcotised that he was unable to walk and was perfectly limber. Bear in mind that this dog received sixteen grains of sulphate of morphia in less than ten hours, eight of which were administered hypodermically in the ninth and tenth hours.

At 6 o'clock P. M. I injected 1-48 of a grain of the sulphate of atropia, and in thirteen minutes the dog was able to walk, and made his way without assistance into a kennel some ten feet distant. I was astonished at this result, as I expected to use several such injections before reviving the animal. Nothing more was done for this dog, and he made a good recovery and is still living.

The third animal under observation was one of the largest St. Bernards that I have ever seen, and was very vicious. At 8:30 A. M. I gave him a half drachm of the sulphate of morphia in some milk. The only effect produced by this enormous dose was to make him drunk. He staggered about, and his eyes presented the appearance of those of a



man when well under the influence of alcohol. In other words, he was reeling drunk.

I was unable to resume the work of my experiment until 2:30 P. M., when I administered eight grains of morphia hypodermically. In a very few minutes slight emesis occurred. In the course of twenty minutes the animal became very restless, moved about and whined as if in great distress. In thirty minutes he became drowsy, but seemed anxious to fight the sleep off.

At 4 o'clock I gave eight grains of morphia hypodermically. In a short time, probably not more than fifteen minutes, the dog was asleep, but not profoundly so. This half asleep condition lasted until nearly 6 o'clock, when eight grains of morphia were injected hypodermically. I then let the animal rest until 7:30, when I found him so thoroughly under the influence of the drug that he could not get up or even turn his head.

I now injected 1-180 of a grain of atropia for each grain of morphia that the animal had received, or 54-180 in six minutes. The respiration began to improve, becoming more frequent and deeper. I again gave him 54-180; this with the former injection making an equivalent of about 1-90 of a grain of atropia for each grain of morphia. In less than fifteen minutes from the time of the first injection of atropia the animal rose up on his fore limbs and looked about. In the course of ten minutes more he dragged himself a few feet from his former resting place and began to show very marked signs of distress. At 9 o'clock he had very decided belladonna poisoning—his mouth was dry and the pupils widely dilated. On the following morning he was still suffering from the effects of atropia, and did not get entirely rid of it for three or four days. He made a complete recovery, but, contrary to the usual rule with such animals, became very vicious, and I was compelled to kill him for fear of his injuring myself or some one else.

The fourth experiment was performed on a common white rabbit, of large size and very sprightly. In the course of two hours he received ten grains of the sulphate of morphia hypodermically, the intervals between the doses being about forty minutes. In thirty minutes after the last dose was administered the rabbit was perfectly helpless. His respirations were slow and shallow. In this case I lost the notes that were taken at the time, and in consequence I can not be positive about the amount of atropia; but I remember

distinctly that its action was not so decided as in the dogs. The third injection was made before the animal showed any marked evidence of improvement. It was not until ten hours after the last injection that the animal was out of danger. He made a good and rapid recovery.

I regret the loss of some notes on the last two experiments, as they would have enabled me to make my report more thorough.

In conclusion, I wish to say that these experiments have convinced me of the fact that atropia is an antidote for opium; but the most important question to be settled is the amount of atropia necessary to neutralize a given quantity of opium, or its equivalent of morphia. From these experiments I have learned that much less atropia is necessary in the canine than is usually prescribed in similar cases in the human subject. Indeed, the quantity given is much less than I expected to administer when I began. However, I started out with the intention of beginning with small doses and gradually increasing.

If I had a case of opium poisoning, and I thought it necessary to use atropia, I would begin with 1-100 of a grain, and repeat as my judgment dictated, waiting long enough for the drug to produce its effects. I believe that we are all too hasty in these cases, and repeat the antidote too frequently instead of waiting for the improvement that is expected to follow the use of the remedy.

It must be borne in mind that patients suffering from an overdose of opium are in reality suffering from carbonic acid poisoning—the poison having been retained on account of insufficient aeration.—*Medical Herald*.

---

### Practitioners' Society of New York.

---

DR. GEORGE F. SHRADY presented a patient, the subject of

#### SPINAL ARTHROPATHY.

The patient was sent to him four years ago, for operation, on account of what was supposed to be a tumor of the left knee. On examination the joint appeared much enlarged, especially on its inner aspect, was very irregular in outline, and was in a condition of lateral subluxation. The articular surfaces were denuded of cartilage, and the ligaments were so lax that not only could lateral deflections be made with

the greatest ease, but the tibia could be rotated to a considerable extent on its longitudinal axis. All these manipulations were painless, nor did the patient complain when steadying herself upon the limb, notwithstanding the fact that the denuded joint surfaces would grate and grind into each other in a way that seemed to threaten the crushing of neighboring bone structures. What appeared on superficial inspection to be a tumor, was an expanded, osteoporotic inner condyle of the femur. Other bony parts of the joints were similarly affected, but not to such a symmetrical degree. The synovial sac contained no appreciable amount of fluid; in fact, the joint as a whole gave the impression of being in a condition of dry disintegration. The left leg, naturally large on account of the patient's obese condition, was much increased in size by fibrinous infiltration of the soft parts, and hyperplasia of the osseous tissues. The condyles and lower third of the femur were similarly affected. At first he concluded that the case was an unusually marked one of rheumatoid arthritis, but inquiring particularly into the general history of the patient, he changed his diagnosis to that of spinal arthropathy. The latter was reasonably confirmed by the coexistence of certain ataxic symptoms. These were not so marked in connection with the tendo-reflex as with the co-ordinating muscular power in the extremities, which was associated with a disease of the articular ends of the bone, due to a faulty nutrition, and dependent on central nervous lesions. The conclusion was at first forced upon him rather by excluding apparently similar local conditions from consideration (principally among these being that of osteo-arthritis) than by many of the more usual and positive symptoms associated with locomotor ataxia. Since this case had been under observation, however, the diagnosis had been confirmed, not only by the progress of the local lesions, but by the development of marked tabetic symptoms. The joint itself had progressively degenerated, its articular extremities had worn away, become more expanded and unshapely, the ligaments had degenerated, and, as a consequence, luxations were produced by the slightest efforts on the part of the patient, rendering the extremity absolutely useless for purposes of locomotion.

A point in the diagnosis was, that these changes had been going on symmetrically, there having been no nodosities developed, as is the rule in osteo-arthritis.

Pathologically, spinal arthropathy was in every essential particular different from purely arthritic degeneration. In the former the bone tissue was first affected by direct interference with its nutrition through the vaso-motor system; the destruction of the cartilages and synovial membranes, and the gradual absorption of osseous elements being secondary manifestations of the disease. In osteo-arthritis the processes were reversed, the soft tissues in and around the joint being the first to be attacked, and undergoing inflammatory rather than trophic changes. The general or ataxic symptoms were not so marked in connection with the absence of reflexes as with lack of the co-ordinating power in the extremities and in the eyes.

The left eye particularly showed marked disturbances of nerve influences, principally as affecting the third pair of nerves, there being ptosis, divergent strabismus, and consequent diplopia. The latter symptoms had been, during the past year, slowly, but markedly, progressive. The other joints in the body were free.

This, then, was the case in brief. The disease of which it was an example was either very rare or not recognized as often as it should be. He had seen but one other. Very many of his professional friends, of large experience, had not seen as many. In the other case to which he referred, which, like this one, was a hospital patient, the disease was also confined to the knee, both joints being nearly similarly affected, and associated with more pronounced ataxic symptoms, especially such as referred to the eye complications—ptosis, strabismus and diplopia.

In both there was a history of specific infection, and in both the usual treatment for the same resulted negatively. The same might be said of medication generally in regard to these cases; the local lesions progress despite everything that had been tried to arrest them, and we were seemingly narrowed down to the simple expedient of giving support to the parts, and thus reducing friction and pressure to the minimum.

Dr. A. A. Smith then read a paper (see p. 178) entitled,  
SOME CONSIDERATIONS ON THE DIAGNOSIS AND PROGNOSIS OF  
ABDOMINAL ANEURISM.

Dr. W. M. Polk said he had had no practical experience which differed from that mentioned by Dr. Smith; in fact, he was obliged to go back seven years to recall any case of



abdominal aneurism. They are not common, and the Society was fortunate in having the opportunity of hearing the three cases presented by Dr. Smith. But there was one thing which was a subject of congratulation for those gentlemen who had to deal with intraperitoneal developments, and that is the prompt tendency which the peritoneum exhibits to resist the progress of any of these formations by throwing out plastic exudation. He should think that in case of aneurism this was a condition which might go on, perhaps not so rapidly as where the inflammation is more acute, but still might develop a membrane which would prove decidedly conservative in its influence upon the growth.

As bearing on the protective character of peritoneal adhesions he could recall an operation that illustrated what surgeons might be willing to do. It was a case of vaginal hysterectomy, and after removal of the uterus he did not close the opening, but simply stuffed it, after withdrawal of the uterus, with iodoform gauze, putting it in direct contact with the peritoneal surfaces, with the confident expectation that the excavation left would be closed over within forty-eight hours, and in that manner exclude percolations of any material which might not be absorbed by the gauze. He expected that the newly-formed exudation would stand guard between the abdominal cavity and the vagina. In the absence of septic influences he thought we might rely upon the peritoneum doing that very thing.

Dr. H. F. Walker gave condensed histories of two cases of abdominal aneurism which came under his care while he was visiting physician to Bellevue Hospital.

In the first case the nature of the disease was recognized. In the second, there was such obscurity of symptoms, and such absence of the crucial signs of aneurism, that though that disease was daily in mind in the examination of the patient, the diagnosis was only made at the autopsy.

Patient number one, admitted July 12, 1875, was a man of forty, a laborer, whose previous health had been good. Nine months before, while driving, he had lost control of his horses, was thrown from his wagon, and struck his left side, in the lumbar region, against a lamp-post. Six months after a small tumor appeared, which since then has gradually enlarged. Its appearance and growth have been attended with dull and shooting pains.

The tumor, at time of admission, had its center four

inches to the left of the median line, one and a half inches above the crest of the ilium. It was seven inches in vertical, and seven and a half inches in transverse diameter. As the patient lay supine, its highest point was raised one and a half inch above the general surface. It pulsated with the radial pulse, but no bruit could be heard by careful auscultation, though ten days after admission an aneurismal bruit was detected. One month after entrance, the tumor had greatly increased, especially in the transverse and antero-posterior measurements. These were, respectively, eleven inches transversely, and two and a half inches above the surface. The vertical diameter was seven and a half inches. The tumor continued to grow till September 3d, when the last measurements were made: vertical diameter, thirteen inches; transverse, fifteen; height of the tumor above the surface, six inches.

September 5th the patient died of asthenia, worn out by long-continued pain and inability to assimilate food.

The treatment had been the maintenance of the supine posture and opium for relief of pain.

The autopsy was made September 6th, under supervision of the curator.

The abdominal cavity, left side, was occupied by a tumor which dislocated the kidney and the intestines. On its anterior or ventral surface lay the psoas muscle much flattened; on the lateral surface the first, second, third and fourth lumbar vertebræ were much eroded, the intravertebral cartilages preserving their size and shape. The last rib also was eroded. Posteriorly, the tumor was covered by skin, lumbar fascia and muscles. Its capacity was estimated at one and a half gallons. A probe passed from the heart through the descending aorta entered the sac near the origin of the cœliac axis. From below upward, along the external iliac artery, the tumor was entered between the mesenteric arteries. Between these two points, a space of about two inches, the coats of the artery exist. Between these points a sacculus extends across the spinal column, and presses against the transverse fissure of the liver. Its capacity is six ounces. It is formed of the arterial coats. A probe pressed against the posterior or lateral inner surfaces of the larger sac is not perceptible to finger outside. The tumor, on opening, is found filled with laminated fibrin and clots, making the solid thickness of the tumor, posteriorly, to be from six to eight inches. The coats of the artery can not

be recognized in this region, the sac here being formed of fascia and skin.

The growth of the tumor has been backward between the psoas muscle and vertebræ. Anteriorly, the sac of the tumor is formed of the thickened peritoneum. Liver flattened and compressed. Kidneys: both show chronic diffuse nephritis, and are studded with emboli. The left is compressed; there are clots in the renal arteries. Coats of the aorta atheromatous. Heart normal.—*Medical Record*.

---

### On the Treatment of Painful Menstruation and Sterility from Flexion.

---

A Clinical Lecture delivered at the Hospital of the University of Pennsylvania, by William Goodell, M.D., Professor of Gynecology in the University of Pennsylvania.

---

GENTLEMEN:—While our patient is getting her ether in the waiting-room, let me give you her history. It is a history which will soon be to you as familiar as household words, whether you practice in cities or at cross-roads. She is a young woman who has been married eight years; but she has never conceived, and since puberty has suffered from very painful menstruation. Since her marriage, her periods, as is usual in such cases, have been getting more and more painful. At present, not only are they unbearable, needing large doses of opium, but she is yearning to become a mother.

Now, what lesions shall we probably discover in this case? Ten to one, a womb bent forward on itself, and a narrow uterine canal. True, the displacement may turn out to be a retroflexion, but this is a lesion almost peculiar to the child-bearing womb, while ante flexion is the natural condition of the nulliparous womb. Here let me disabuse your minds of a prevalent error, viz.: that ante flexion in itself is a pathological condition. Many text-books speak of this flexion as a lesion, and exhibit many forms of pessaries devised to rectify this so-called displacement. But in the great majority of cases neither ante flexion, nor, for the matter of that, ante version, is pathological. In almost every unmarried or barren woman you will find the womb either bent forward or tilted forward, and resting on the bladder; for this, in varying degrees, is its natural position. The mistake made is in at-

tributing to this natural position of the womb the various forms of pelvic trouble, especially that of irritability of the bladder, to which women are so liable. But the kinship between the brain and the bladder is a remarkably close one. This has lately been studied by two Italian physiologists, Mosso and Pellacani, who go so far as to contend that "every mental act in man is accompanied by a contraction of the bladder." The irritability of the bladder is then one of the first symptoms of loss of nerve control. Everybody is liable to it. You, on examination day, will be annoyed by it. Many a lawyer before pleading an important case, and many a clergyman just before delivering a discourse, is compelled, from sheer nervousness, to empty the bladder. So it is with the lower animals, which, when frightened, micturate involuntarily. A nervous bladder is then one of the earliest phenomena of nervousness. Now, a hysterical girl, or a woman whose nervous system has collapsed under the strain of domestic cares, consults a physician for such symptoms of nerve prostration as wakefulness, utter weariness, a bearing-down feeling, backache, and perhaps, above all, an irritable bladder. Upon making a digital examination he, of course, finds the fundus of the womb resting on the bladder, and at once jumps to the conclusion that the whole trouble is due to the pressure of the womb on the bladder, viz.: to the existing anteflexion, or to the anteversion, as the case may be. He now makes local applications, and racks his brain to adapt or to devise some pessary capable of overcoming the supposed difficulty, forgetting that the upward or shoring pressure of the pessary on the bladder must be greater than the corresponding downward, or gravity, pressure of the womb. There is, in fact, no pessary but the dangerous stem-pessary which can meet the end without pressing upon a fold, or double thickness, of the bladder. But, very fortunately, anteflexion is not often pathological. It is certainly not pathological in the foregoing instances; for the symptoms, especially the vesical ones, are not due to the pressure of the womb upon the bladder, but to sheer nervousness, or nerve prostration, which is the thing to be treated, and not the womb. There are exceptions to this rule, but not many. For instance, a womb, heavy from subinvolution, or from the presence of a fibroid, may make uncomfortable pressure on the bladder.

If anteflexion is the natural position and condition of the womb, when is it pathological? It is pathological whenever



it is the cause of dysmenorrhœa or of sterility. Usually dysmenorrhœa and sterility are associated, but occasionally the latter is the only symptom; for it is evident that the crooked womb can more readily expel fluid contained within it than admit a fluid outside of it. The phenomena of a typical case of dysmenorrhœa, from anteflexion or from retroflexion, are as follows: At the outset of menstruation the first few drops are somewhat painful. The pain then increases in severity until, reaching its acme, a slight gush of menstrual fluid takes place, followed by a lull in the sufferings. The pain then gradually increases until it culminates in another gush. The meaning of this is, that the bend in the womb imprisons the menstrual fluid, which goes on collecting in the cavity until the swelling up of the womb straightens out the bent portion, dilates the narrow canal, and allows the pent-up contents to escape, just as the coils of a hose first swell, and then straighten out before the water can flow through them. Relief from pain lasts until the fluid begins again to collect. This is called stenosis from angulation.

Sometimes a girl has little or no pain at her menstrual periods. She marries, does not conceive, and by and by dysmenorrhœa sets in, which goes on increasing. What is the explanation of this? It means that the flexed canal of the womb was originally just large enough to permit the slow escape of the menstrual fluid, but that the congestions from sexual intercourse have caused a thickening of the lining membrane of this canal, which has narrowed its calibre. Then, again, the uterine efforts to force out the pent-up fluid cause the various tissues of the womb to hypertrophy. We see this also in unmarried women, the dysmenorrhœa increasing with their age. Nature intends that the periodical congestions of the womb should be interrupted by pregnancy and lactation, and without these interruptions the mucous lining of the womb is liable to thicken, and by its thickness to narrow the canal. If, then, to these menstrual congestions be added the sexual congestions of marriage, this hypertrophy is greatly increased, and the barren wife suffers more than the old maid.

But here comes our patient. Let me examine her. Sure enough, she has an anteflexion, for through the anterior wall of the vagina I feel the body of the womb resting upon the bladder. The cervix is long and conical; the os externum very small.

I pass the sound. It stops, as you see, at the internal os

—viz.: at the beginning of the bend—and I can not coax it in any further. By introducing the speculum, and straightening the womb by traction made with a tenaculum, the sound now goes in, but even yet with difficulty. It gives a measurement of nearly three and a half inches, which is a large measurement for a young woman who has not borne any children. This hypertrophy is owing partly to such repeated congestions as I have just described, and partly to the muscular effort made by the womb to extrude not only the menstrual fluid, but its mucous secretions.

Now, what is the remedy for this condition? For a number of years the operation most in vogue was the cutting, or bloody operation of Sims. By it the canal is enlarged by incisions. But the objections to this plan are: that it is a dangerous operation, having caused the death of many patients through peritonitis; that it is not a very successful operation, as the incisions are liable to heal up and the dysmenorrhœa return; and, finally, that it always deforms the cervix, and sometimes causes lesions analogous to those resulting from a natural laceration during labor. I shall not, therefore, burden you with the details of this operation, which fortunately is falling into disuse. Then, again, the cervix is, at the present day, often dilated by tents, or by graduated bougies; but the former is dangerous, and both are painful, tedious and unsatisfactory.

The operation which I can recommend to you most highly, and one which I shall now perform on our patient, is that of forcible dilatation. The instruments which I use are two modified Ellinger dilators of different sizes, made under my supervision by Messrs. J. H. Gemrig & Son, of this city. Ellinger's model is the best on account of the parallel action of the blades, which dilate the whole track of the canal uniformly. The smaller of these dilators has slender blades, and it pilots the way for the other, which is more powerful, having blades that do not feather. The lighter instrument needs only a ratchet in the handles, but the stronger one should have a screw by which the handles are brought together. Lest the beak should hit the fundus uteri, and seriously injure it when these instruments are opened, their blades are made no longer than two inches, and are armed with a shoulder which prevents further penetration. The larger instrument opens to an outside width of one and a half inches, and its blades are roughened, or corrugated, by shallow grooves, in order to keep them from slipping out.

This dilator has also a graduated arc in the handles, by which the divergence of the blades can be read off.

In a case of dysmenorrhœa, or in one of sterility from flexion or from stenosis, as in the woman before us, my mode of performing the operation of dilatation is as follows: The patient is thoroughly anæsthetized, and a suppository containing one grain of aqueous extract of opium is slipped into the rectum. She is then turned on her back, and drawn to the edge of the bed, each knee being supported by an assistant. The light must be good, so that the operator can see what he is about. My bivalve speculum being now introduced, the vagina is well swabbed out with a five per cent. solution of carbolic acid. By the aid of a strong uterine tenaculum the cervix is steadied, and the smaller dilator is introduced as far as it will go. Upon gently stretching open that portion of the canal which it occupies, the stricture above so yields that, when the instrument is closed, it can be made to pass up higher. Thus, by repetitions of this manœuvre, little by little, in a few minutes' time a cervical canal is tunneled out which before could not admit the finest probe. Should the os externum be a mere pinhole, or it be too small to admit the beak of the dilator, it is enlarged by the closed blades of a pair of straight scissors, which are introduced with a boring motion. As soon as the cavity of the womb is gained, the handles are gradually brought together, and allowed to stay so for one or two minutes. The smaller dilator being now withdrawn, the large one is introduced, and the handles are then slowly screwed toward one another. If the flexion be very marked, this instrument, after being withdrawn, should be reintroduced with its curve reversed to that of the flexion, and the final dilatation then made. But in doing this the operator must take good care not to rotate the womb on its axis, and not to mistake the twist for a reversal of flexion. The ether is now withheld, and the dilator kept *in situ* some fifteen minutes, when it is closed, removed, and the vagina well syringed out with the same solution of carbolic acid. Occasionally a slight flow of blood will last for several days after the operation, simulating the menstrual flux. Often the flux is precipitated, or it is renewed, if the operation follows or precedes it too soon. The best time for dilatation is, therefore, midway between two monthly periods. Were the case before us a retroflexion, I should, after the dilatation, put in a pessary long enough to span the angle of

flexure. This never fails to straighten out the womb, and in time to restore it.

Although this operation looks like rough work when compared with the neat but dangerous cutting one, the patient will probably need not more than two suppositories, and she will complain merely of soreness for one or two days. To forestall any tendency to metritis she will be kept in bed until all tenderness has disappeared. Pain will be met by rectal suppositories of opium, and by large poultices laid over the abdomen. From this operation I have seen only slight pelvic disturbance, but it has always been readily controlled, and has not given alarm. In one case of dilatation, complicated by a fibroid of the womb, a uterine colic lasted for several days, but it was finally subdued by *asafoetida* in large doses, and never became inflammatory. Should the temperature rise, and symptoms of pelvic inflammation appear, the ice-bag should replace the warm poultice. But I have not yet met with a temperature high enough to need this energetic mode of treatment.

In the great majority of cases I dilate the canal, not to the fullest extent of the larger instrument, but, as in the case before us, to one and a quarter inches.

---

### Hyperidrosis.

---

HYPERIDROSIS or excessive sweating is a functional disease of the sweat glands which manifests itself either in a general or a localized form. In a general form it is an evidence, either of exposure to excessive heat or of some internal pyrexia, due to the rapid oxidation of tissues. In all fevers, in phthisis, and other systemic diseases accompanied by great waste of tissue, excessive sweating, which is generalized, forms, frequently, a prominent symptom. The localized form, however, is that to which our attention is most often directed, and to which treatment must be carefully employed in order to obtain successful results.

The parts which are most liable to be attacked are such as are kept warm and more or less confined. Hence we notice that the pudenda, perineum and soles of the feet are the most frequent seats of the affection, whilst the palms of the hands are also quite often implicated. In parts which are subjected to heat it generally happens that in addition to an excessive secretion of sweat, there is also the pres-



ence of a disagreeable odor. This is caused by the decomposition of the sebum or fat and more or less putrefaction of the macerated epithelial scales which are separated from the epidermis by the action of the increased amount of sweat.

Upon examining a part subject to this disease we find that the skin has a soggy appearance, that the horny layer of the epidermis (scarf-skin) is easily rubbed off, and that beneath a pinkish or whitish appearance is presented. The patient will complain that the skin is more or less tender to pressure and very painful to friction. Especially is this the case with the soles of the feet. Besides this the mental distress it occasions is, in many instances, quite marked. Should the parts be exposed to any considerable amount of friction, "chafe" or erythema intertrigo may supervene and thus aggravate the condition.

The causes are numerous and are such as will tend to inhibit the action of the vasomotor and trophic nerves of the skin.

The general treatment which is employed should be directed to the general condition of the patient and have in view the placing of the whole system in as good a condition as possible. Tonics of various kinds, if indicated; nervines, etc., are to be administered upon general principles.

The local treatment is perhaps the more important as well as that from which better results are to be anticipated, and vary a great deal with the condition of the trouble and its chronicity. In mild cases where the sweat is not poured out in excessively large quantities, and where the decomposition does not set in very rapidly, frequent washing followed by the application of astringent lotions is sufficient. The process will very often be hastened by occasionally painting the surface with tincture of belladonna. As astringents, may be used, catechu, tannin, alum, etc. The number of remedies which have been used for this trouble is large, and they have been succeeded by more or less success. Chloral hydrate in solution is a very good application, but should not be used too strong. After applying the lotion a dusting powder should always be used.

The form of hyperidrosis for which relief is most often sought and which is most difficult to relieve, is that affecting the feet. If any of the means indicated above fail, there are a number of others, one of which may succeed. A good one is that lately adopted in the German army. It

consists of two parts of salicylic acid mixed with one hundred parts of best mutton suet, and applied to the parts daily, care being taken not to wash the affected locality, but wiping it dry and seeing to it that opposing surfaces do not come into contact. Another method introduced by a French army surgeon consists in washing the feet well, applying powdered subnitrate of bismuth and renewing often without further washing. By dusting the feet liberally every day with this preparation, a cure will often be accomplished in a fortnight.

I have found that in excessive sweating of the soles of the feet, especially, the application of ordinary adhesive plaster, renewed every other day, will give good results in ten or twelve days. In place of this a belladonna plaster may be used, but will not be as satisfactory to the patient.

Carbolic acid lotions, beta naphthol in alcohol, boracic acid in the form of a saturated solution, permanganate of potassium, corrosive sublimate, sulphate of zinc are further examples of external applications, but Hebra's method is perhaps the best for obstinate cases, and if one course of this treatment does not suffice, another one ought to be undertaken, as improvement, if not cure, will follow each attempt. The method, in brief, is as follows: The feet are well washed and dried with a cloth and dusting powder. Then the soles and toes are covered snugly with pieces of cloth upon which has been spread, to the thickness of an ordinary knife-blade, the unguentum diachyli. This ointment is made by adding one part of litharge to four of olive oil and gradually adding water enough to make a stiff ointment. The process is repeated in twenty-four hours, the feet, however, being merely wiped dry with a cloth and dusting powder. After repeating the application for ten to twenty days, dusting powders alone are used, for a time, until there is an assurance of a cure.

The prognosis of the disease is fair, but should be guarded and based upon each individual disease. In hyperidrosis dependent upon neuralgia or similar condition, it is good; whilst, in the majority of cases, where the cause is obscure, it is not so favorable, and in old standing cases of local hyperidrosis, especially of the feet, it is very often bad and requires a great deal of patience and a determination to carry out details on the part of the patient to bring the case to a successful termination.—*St. Louis Medical and Surgical Journal.*

## Cases of Congenital Malformation of the Eyes.

DR. F. RICHARDSON CROSS thus writes in the *Brit. Med. Journal*:

*Symmetrical Microphthalmos*.—F. L., a female child, four months old, was brought for my opinion as to its power of sight. The child was well grown, the head and face well shaped. The orbits were fully developed, but the lids were small and lay deep in the orbit, giving an appearance as if each globe had been enucleated. The lids were usually closed; when open, a mere chink existed between them. This chink (the palpebral fissure), when more closely examined, was of a good length from side to side, the external canthus being drawn inward to some extent; the lachrymal passages were well developed, and the caruncle fairly large. Under the lids, imperfect eyes could be recognized, moving sluggishly in the direction of a light, or of objects, or of the mother's voice; and small dark corneæ appeared between the narrow palpebral fissures. There was a distinct tendency to inward squint. The movements of the eye were cramped, but the globes could roll fully from side to side. The lids were separated with some difficulty, the rim of the palpebral fissure being somewhat tense, and with scarcely any vertical separation. Healthy conjunctiva covered much contracted symmetrical eyeballs. The cornea in each had a diameter of two lines, and projected in front of the rest of the globe in natural proportion. A complete blue-gray iris, with pupil, existed in each eye. No further definite examination could be made. But the child seemed to possess very small eyes, of which the various constituents were all atrophied, and in due proportion. Four elder children had been born, quite healthy in every respect, except the third, who died when ten months old.

Dr. Fairbanks, of Wells, writes that, when this third child was born, "the orbital cavities were so small, and the lids so rudimentary, that it was impossible to discover anything resembling an eyeball." He adds: "I have seen the last child, and it is in quite a different condition."

When the third was about two months *in utero*, the mother was very much frightened by an old tramp, who came into her shop and threatened and abused her. This old woman had peculiarly small and sore eyes, which made a great impression on Mrs. L. the whole time she was carrying the child. When the child was born without eyes, the mother



at once attributed it to the effect produced on her by the old woman. I consider, from a recent examination of L., that the eyes are growing larger, and the power of vision is somewhat improving. Several cases, both of congenital absence of the eye and of its atrophy, have been put on record; but the microphthalmos seldom seems to be symmetrical, nor is the eye usually so perfect as in this case, whilst the apparently complete anophthalmos of the earlier child adds to its interest.

*Irideræmia.*—The subject was Daisy C., aged two years, a well formed child. The palpebral aperture was narrowed, a broad fold of skin passing from the upper to the lower lid, hiding the caruncle. There was constant rolling nystagmus, the eyes were well shaped, and perhaps rather small. The child looked toward shining objects (watch, silver pencil-case), but without any power of fixation. It was said to find its way about the nursery, avoiding obstacles; and it was believed to recognize jam on bread, and to choose this in preference to butter; but the power of vision was much impaired. The eye did not seem particularly oversensitive to light. The cornea, sclerotic and globe of the eye appeared perfectly normal. The iris was entirely absent. Eserin used for several days gave no appearance of an iris; but, without any leading question from me, the father, who is a most intelligent man, volunteered the information that the child had been holding objects more closely to the eye. This statement might be of importance as showing the presence of the ciliary muscle.

Direct examination with the ophthalmoscope showed a perfectly clear red rim round the lens. The lens appeared cloudy in places, according to the direction of the mirror; and the shadow passed in every direction, as in myopia. The fundus was pale red, with well defined retinal and choroidal vessels. The discs appeared white, with irregular edges, the vessels in the neighborhood being tortuous. There was no posterior staphyloma, nor atrophic patch. The appearance suggested a former neuritis, but was such as is not frequently seen in hypermetropia.

I will not trust myself to speak of the presence or absence of the ciliary processes in this case, as I find no special note of it, and have had no opportunity of repeating the examination. Such authors allege that these processes can be clearly seen in cases of irideræmia; whilst others, on the contrary, assert that they are absent. Their absence is rendered



probable by the fact that they are developed with the iris from the front part of the outer layer of the optic vesicle blending with the mesoblast, which partly passes in front of the lens to form the iris, and partly becomes bent back at the lens-periphery, to form the ciliary body and the pars ciliaris retinae; whilst the ora serrata is the developed anterior edge of the inner wall of the optic vesicle.

As I am credibly informed, the mother, who had given birth to two other healthy children, asked, directly this child was born, about its eyes; she expected something wrong; for she had been frightened at two months by a dog biting her, and a little later by the man-cook, who was trying to stab a servant in the kitchen. In each case, the staring eye was the main impression made upon the mother's mind.—*Med. and Surg. Reporter.*

---

### New Theories Regarding Cancer.

---

As it has ever been the aim of physicians to cure or alleviate the symptoms of this dreaded disease, it is not surprising that ever and anon new theories should be advanced and new methods of treatment follow each other in rapid succession. Yet we are forced to admit that absolutely nothing has been added to our therapeutic resources. Facts are not wanting to prove a steady increase of malignant disease both in this country and in Europe. During the decade of 1860-69 the report of the Registrar-General shows an increase of 248 cases, while in the next ten years the increase was 320. In New York City the rate of mortality ten years ago was 400 per million inhabitants. At the present time however, it is 530 per million, showing a very decided increase. According to the report of the Secretary of the Health Department of Baltimore, the number of deaths between the years 1830 to 1874 was 1,116, and in the decade of 1875-84 the number had grown to 1,581, figures which establish beyond dispute the truth of this supposition. It is, of course, impossible to exclude all sources of error in making up these reports and to escape false deductions, yet enough has been given whereby to form general conclusions. There has been for some time past a tendency against the surgical treatment of cancer, even in some of the earlier stages of the disease. Lemaitre only a few months since expressed the opinion that patients

with cancers lived longer without operative treatment, believing that the latter favors early return and more rapid growth, and that by the removal of the growth, the danger of metastasis to other organs is increased. These opinions are supported by Morris, Verneuil and others of wide experience. The opinion that growth after removal is more rapid is held by a large number of surgeons at the present time. On the other hand there is no want of statistics to show that, by the use of the knife, not only is life made more endurable, but it is very much prolonged. It is shown in the report of the Cancer Hospital at Brompton, that of 240 cases operated on, the average period of immunity was twenty months. The statistics of Satterthwaite show that life is prolonged eleven months, or more, by operative treatment.

The general consensus of opinion at the present time is, that use of the knife is indicated in the earlier stages of growths which give evidence of malignancy, and occasionally in cases which have become more chronic. The promiscuous removal of malignant growths is discountenanced by our best surgeons. Even during the past two or three years we have grown more conservative in this particular, and now most prefer to operate only upon selected cases. The presence of a small and suspicious tumor does not invariably call for the use of the knife, for there are hundreds of instances in which such growths have remained quite stationary for years, or even for a lifetime. Neither is the long existence of the tumor and imminent ulceration invariably a contraindication for removal, yet it is quite safe to state that whenever the lymphatics have become the seat of secondary deposits, relapse is almost inevitable. The surgical treatment of cancer—for there is no other—calls for much discrimination and sound judgment on the part of the physician, and in deference to present opinion it will do no harm to err on the side of conservatism.—*Editorial in New England Medical Monthly.*

---

### Use of Tobacco by Boys.

---

DR. J. P. GRAY, Superintendent at Utica, speaks thus concerning the prevalent use of tobacco by boys and young men:

The use of tobacco and stimulants in youth is a potent

factor in producing physical and mental degeneracy. No boy under eighteen should touch tobacco, and it would be better to say twenty. The habitual use of stimulants is in some respects less and in others more deleterious, and they should only be used with reference to improving health, and then only under the advice of physicians. The reason is plain. Through the period of physical growth, the nervous system should not be subjected to habitual narcotism or stimulation. They both interfere with the digestive organs, and with the action of the heart. On some they act as excitants; on others as sedatives—unduly increasing or unduly lowering energy; in either case the result is evil and only evil.

A cigar, cigarette or pipe is taken by a boy to help in some way; to one it is a stimulant and a spur to work, and must therefore be kept up. To another it is a quieting sedative, and it makes him feel easy and as though he could get along somehow, so he keeps it up, and gradually it dulls ambition, abates energy and reconciles him to a lower place as a student and a worker.

I have seen these effects on boys of my own acquaintance, and I have watched them from boyhood to manhood. Many a bright boy at twelve is dull and mediocre at eighteen. He has betrayed the legitimate prospects of youth by tobacco, and possibly by beer, and by the habits they are apt to induce, and will sit through life half way up the ladder instead of at the top. I would ask the boys and young men of these days: Is it nothing to miss the higher chances of sound, vigorous manhood? Nothing to be stunted bodily and mentally, and be less than what you might be? To be old before your time?

But is this always the result of such habits? No. There are those who grow and develop into strong, vigorous manhood, physically and mentally, in spite of the effects of such habits. All that can be said is that their systems tolerated both tobacco and liquor. However, I know young men who were wise enough to stop or modify the narcotism and stimulation, finding for themselves that it was injurious, though tolerated. There is a proportion of youth who are at the best not strong, but to them such indulgences are simply more dangerous.

But you inwardly ask, "What has this to do with insanity?" Much. It tends to impair and disorder physical growth and the development of activity throughout the or-

ganism, but especially in the brain and nervous system, thus laying a deceptive and defective foundation for healthful life, and at the same time rendering the organism more susceptible to the influences which originate and develop the morbid processes which we call disease. Among the diseases thus invited are such nervous disorders as neuralgia, St. Vitus' dance, general debility, arrested development in various organs, as shown in headaches, lassitude, defective digestion, and finally in many permanently lowered mental power. In cases where insanity comes on it is usually later, and rather as a consequence of the habits which have weakened the constitution.

---

### The Ergot Question.

---

RUDOLPH KOBERT, M. D.

---

*Ergotinic Acid.* As regards this substance and its sodium salt, I have administered it internally and hypodermically to pregnant bitches, rabbits, cats and sheep. The doses were small and increased till they were toxic. The results entirely agreed with former ones: when administered internally even the largest doses are well borne, without the supervision of uterine contractions and without any material disturbance of the mother. At most the stools become semi-fluid. When injected subcutaneously, relatively large doses cause complete narcosis lasting 24 to 48 hours, during which reflex action ceases; nevertheless, neither contraction of the uterus nor expulsion of the young occurs. After very large doses the blood pressure falls very low, and as a consequence the young die, but are not expelled. From these experiments it will be seen that ergot of rye does not owe its ebolic power to the ergotinic acid contained in it, and that we may consider as clinically worthless all preparations of ergotinic acid, and of sclerotinic acid (so-called), and all aqueous extracts which do not contain those principles which are soluble in alcohol.

*Cornutine:* This is supplied commercially by Gehe & Co. (Dresden), and is not to be confounded with the very different *Ergotinic* of Tanret. The latter is quite inert. The former, however, produces uterine contractions, both in animals which are pregnant and in those which are not pregnant, but with this difference, that in the latter the contractions are accompanied by coincident vomiting, diarrhoea, saliva-



tion and irregularity of the pulse ; but in the former the irritability of the uterus is much increased, and as a consequence the uterine movements come on after doses so small that no other symptoms at all appear. Consequently it was always possible, in dogs and cats, to bring about the expulsion of the foetus without seriously jeopardizing the life of the mother, when the cornutine was injected subcutaneously. It was a matter of no consequence whether the young were mature or not. The amount necessary to this result was less than an  $\frac{1}{8}$  grain. Gehe's preparation, not being as yet a chemically pure one, must be administered in larger doses. *Sphacelinic Acid*: This is a resinous body, insoluble in water, and must be administered by mouth in the form of emulsion. In dogs and cats a sufficient dose never failed to evoke powerful labor pains in the uterus followed rapidly by the birth of the foetus ; yet not one of the mother animals lost her life in consequence. The contractions after this substance we may describe as being tonic, and after the cornutine as being clonic. It will be seen that in the ecboic action caused by ergot, both cornutine and sphacelinic acid take part. Cornutine acts by influencing directly the center for the uterine contractions situated in the spinal cord ; but sphacelinic acid acts directly upon the uterus itself. And the combined action of these two substances is necessary, if we wish to produce the action of ergot upon the uterus and yet avoid any other untoward effects. Therefore the only rational preparation for use in cases of parturition is one which contains all the cornutine and sphacelinic acid, but no ergotinic acid ; for the latter is very injurious to the stomach and has no influence upon the uterus. At my desire Gehe & Co. (Dresden) have prepared an article answering the above indications (extractum secalis cornuti cornutino-sphacelinicum Kobert). Internally it was *when fresh* exceedingly active, producing abortion with absolute certainty in pregnant animals. In the form of pills it has been employed with success in man to stop hæmorrhages in various organs, and also in the treatment of vascular dilatation in cutaneous diseases. Unfortunately it does not keep well for more than six months ; a preparation a year old is almost absolutely worthless. *It is necessary to state that neither ergot itself nor any of the numerous commercial and European and American preparations which I have examined have retained their therapeutic powers for more than 12 months.* Of course, the ergotinic acid remains unaffected, but this is valueless. The

preparation of an active extract depends upon the solubility of cornutine and sphacelinic acid in absolute alcohol, in which latter ergotinic acid is insoluble. It is only necessary to bruise well the fresh ergot and to exhaust thoroughly with the strongest alcohol. After evaporation of the alcohol at a low temperature there remains a residue consisting of the inert fatty oil and the whole of the cornutine and sphacelinic acid. A portion of the oil may be previously got rid of by extracting with ether, but at the sacrifice of a small amount of the active substances. The extract thus prepared is not well suited for subcutaneous injection. The dose can not be foretold, because the proportion of active principles present in ergot varies exceedingly with the year and the district.—*Practitioner*, Lond., Dec., 1885.

---

### Syphilis is a Constitutional Disease from Its Inception.

---

DR. OHMANN-DUMESNIL read a paper, "Syphilis is a Constitutional Disease from Its Inception," in the St. Louis Medical Society.

Dr. Hurt.—Some years ago, in France especially, physicians took the position that when the system became syphilized, that you could not inoculate the system with the syphilitic virus, and that your attempts to do so would result in failure, and that was said to be a test of the fact that it was syphilis; otherwise, if the inoculation propagated a sore somewhat similar in character to the primary sore, it was a chancroid; a prominent physician further north—Beck—was publishing the fact of his success in the cure of syphilis by inoculation. How could one man diagnose syphilis by the fact that he could not inoculate and another cure syphilis by inoculation?

Dr. Blount.—I had always been of the opinion, until the last three months, that it was impossible to abort an attack of syphilis after a chancre has appeared, but I happened to have two cases in which the patients both contracted syphilis from the same woman on the same night. One of the gentlemen came to me in the course of a week, and said he had noticed that morning a small sore on the under side of his penis, and he wanted to know if, by thorough cauterization, I could not destroy the disease.

There was already a hardened base; it was a pretty small sore, being about the size of a split pea. He insisted upon it being thoroughly cauterized, and I did so, cauterizing it thoroughly with nitric acid, and the sore healed. There were never any other manifestations of syphilis. The second gentleman had all the symptoms of syphilis; had the eruption of secondary syphilis, which was very well marked. I would like to know if it is possible that the first gentleman did not have syphilis?

Dr. Atwood.—The syphilitic sore never occurs in less than ten days to two weeks.

Dr. Blount.—Both these gentlemen contracted the same disease from the same woman, and I do not think one man could contract a simple sore and another syphilis from the same woman on the same night.

Dr. Johnston.—John Hunter, years ago, divided it into hard and simple chancre, and he was a man of great observation. Following after that, an American, who afterward became a French citizen—Ricord—advanced further in his investigations, and a Greek word or termination was applied to the soft chancre, and it was called a chancroid. It was really no advance in science over the simple chancre of John Hunter, but it sounded a little more learned. We all know that Ricord taught the doctrine that syphilis was a local disease at the commencement; that within five days or sooner, when the chancre made its appearance, if you cauterized it thoroughly, you destroyed the virus. That was the accepted doctrine when I entered the profession, and, in treating these cases, I cauterized them thoroughly and completely with caustic. The sore would heal, and I believed, under the teaching of Ricord,\* that the disease was destroyed. But how sad the disappointment! The soft chancre or chancroid, I believe, is as different from the true chancre as the bright noonday sun is from the reflected light of the moon. When the medical literature came across the ocean, it was read carefully and studied and believed. Experience has taught me that it was not true. It is contended by Johnethan Hutchinson that there is a syphilitic virus which creates constitutional syphilis or true syphilitic matter. In a certain constitution you may have a soft chancre, and, if I am not mistaken in my judgment and observation, I have seen constitutional syphilis following simple chancroid. I have had a non-healing ulcer having all the appearance of a soft chancre, and I believe it was a soft chancre,



and within sixty days I have seen syphilitic roseola ; I have seen syphilitic ulcer of the mouth, and I am well satisfied that the virus that produced these sores was the virus of the soft chancre, and not the hard. I have had other chancres of the same appearance, so far as my judgment was concerned—there was ulceration, there was suppuration, there was an excessive flow of pus, and I have cauterized that chancre, and the patient got well, and did not have any bube or appearance of syphilis ; but I have never seen what I term a true, hard, infecting chancre that got well in that way. The gentleman who reported the case which did get well in that manner, did not state how long it has been since he treated the patient. How long is it, doctor ?

Dr. Blount.—I think it is about a year now since the inoculation.

Dr. Johnston.—Well, that is long enough. I have seen soft chancre appear within forty-eight hours after the exposure, especially where there was an abrasion, where the frænum is torn or injured, the system, in these cases, may become infected and the constitution affected and the hard chancre make its appearance within forty-eight or fifty hours ; but, as a rule, in a large and overwhelming majority of cases, the sore makes its appearance about the eighth or tenth day ; the matter seems to be governed very much by the same laws as other inoculations. But we have to wait this period, which is termed the period of incubation ; when there is an abrasion, the sore makes its appearance earlier ; but the poison has been likened to the poison of the rattlesnake—from the time the particular cell imbeds itself and fastens on to the mucous membrane of the glands or prepuce of the penis, from that moment the man has syphilis ; but, like malarial fever, it takes a certain time to develop. Now, I have never succeeded in eradicating the disease by cauterizing, nor do I believe any one has ever cut it out. If you should take your knife and cut out the sore immediately after it appears, you will not eradicate the disease. Suppose a patient is vaccinated with bovine virus or human virus, and, after waiting an hour, it is contended that we could, by cutting out the part, eradicate the virus from the system and prevent any further effect upon the system. Not at all, because it only requires a very short period of time for any poison which enters the system to be carried through the circulation. If you take a hypodermic syringe



and inject morphine or atropine, it requires a very short time for the poison to pass through the entire system.

Dr. Hughes.—I believe from my observation that syphilis is both a curable and incurable disease. I believe that the curability of syphilis depends upon the character of the constitutional change which has taken place at the time the case comes under observation. I believe that his idea that syphilis is incurable obtained a hold on the professional mind because of the fact that the majority of cases of syphilis, when they fall under medical observation, have reached a stage of destructive change—of retrograde change, more or less permanent in the tissues, and which is irremedial.

Dr. Bremer.—I think that syphilis is curable. Its curability depends, however, upon what kind of syphilis we have to deal with. If syphilis attacks the highest specialized tissues, there is no reparative process which will reproduce the tissue.

According to the law that the higher and more specialized the tissue is the less chance there is for its reproduction, it is claimed that nerve cells never will be regenerated, but that the lower kinds of tissue are substituted—that is connective tissue.

That syphilis is curable is evidenced from the fact that persons who have gone through undoubted syphilis may contract it again after a series of years, and I know of a medical man, who was identified with progress in anatomy and physiology, who died of a second infection. He had long before contracted syphilis, and twenty years later again contracted the disease and died from it. The second infection of constitutional syphilis must be always differentiated from a local hard chancre.

A person still affected with constitutional syphilitic virus may contract a true Hunterian chancre—that is, the chancre may make its appearance in a person still under the influence of the virus, but that chancre, as a rule, does not make any secondary manifestations. It heals in due course of time, without any treatment almost, from four to six weeks, and that is the end of it. This has frequently been observed. Now, as to the curability of the disease when it attacks the nervous system; as long as we have to deal with an inflammatory process of the sheath of the nerves, of the connective tissue of the nerves, especially of a gumatous character, we can accomplish a cure, but as soon as the

parenchyma of the nerve cells themselves\* are implicated, a cure is impossible.—*St. Louis Med. and Surg. Jour.*

---

## The Treatment of Functional Impotence.

---

DR. ULTZMAN, of Vienna, divides impotence in the male into four general classes: (1) Organic, a variety which comes rarely to the general practitioner for treatment. Here the trouble is due to a malformation or deformity of the genital organ or the surrounding parts, and these cases are properly referred to the specialists. (2) Paralytic impotence, usually one of the symptoms of a general paralytic affection, and the treatment being that of the primary trouble. (3, 4) Psychical impotence, and impotence due to too early ejaculation of the seminal fluid. These are the two forms which present themselves most frequently, and also the two which yield most readily to the proper treatment. They occur usually in strong, healthy young men, who are otherwise in normal health.

According to Dr. Ultzman, internal remedies, with the exception of iron and quinine, which are used as tonics in the less common class of cases where the patients are not in good health, are completely useless, and do more harm than good. The treatment should be always principally local. The disturbance is a functional one, and consists in the incapability of having a normal erection. Since the capacity of exciting erections resides in the prostate, this is the point to which therapy is to be directed. This is of several varieties; the simplest of all is the sound treatment.

The Chariere sounds, beginning with No. 20 French, and continued up to No. 30 French, are introduced daily into the bladder, the patient being in the horizontal position, that being the only proper position in passing urethral instruments. At each insertion the sound is left in from five to ten minutes. It is found to be of benefit after the sound is in the bladder to slightly depress the handle, in order to increase the pressure and distension in the prostatic urethra. By this method the metallic pressure alone acts upon the prostate, and usually in a few days powerful erections are excited. In some cases even after a few minutes, while the sound is still in the urethra, normal erections have taken place.

Another method of treatment is with the use of the cool

sound (Kuhlensonde), the psychropher. This is a thick metal catheter, closed at the vesicle end and divided into two compartments by a partition running the entire length of the catheter. These two compartments open into each other at the vesical end. At the upper end they form two separate tubes, to which are attached rubber tubes, one carrying the water to the catheter down one side and back the other, and to an empty vessel by means of the second rubber tube, thus having a continuous flow through the catheter, the water coming from a vessel at a slightly higher level than the patient. In this case both the pressure of the catheter (or rather double tubular sound) and the temperature of the water act at the same time upon the prostate. The sound is passed as before until it is into the bladder, daily, but left in a somewhat longer time.

The temperature of the water is usually from  $9^{\circ}$  to  $10^{\circ}$  R. Some patients have a urethra which will not bear this temperature; in that case it can be raised to  $14^{\circ}$  to  $16^{\circ}$  R. In some cases warm water is of value. It is especially to be tried where no result is observed from the use of cold.

Water of a temperature of  $30^{\circ}$  R., or above, can be used. This, in some cases, has effected a very rapid cure. The thermometric excitation of the prostatic urethra by means of the cool sound Dr. Ultzman has found of remarkable service.

The use of astringents upon the prostatic portion is a third method of treatment. Small suppositories are carried in and applied exactly at this location by means of the *porte remede*. Tannin is commonly used, and is a good remedy. For the first application .05, later .10, in a two centimeter long suppository, is applied. Urine is not to be passed for half an hour after the insertion. These are to be inserted every day, and continued not less than once in two days until normal erections are excited.

Still another method consists in dropping three or four drops of a five-per-cent. solution of arg. nit., by means of the deep urethral dropper-syringe of Ultzman, upon the prostatic urethra. This remedy is applied once in three or four days. In impotence with premature ejaculation the above remedies are of special value as auxiliary means to the usual treatment of quinine, iron, cold baths, change of climate, etc.

In the paralytic form the above means are always to be tried with faradization. In the use of electricity, one pole

is to be inserted into the rectum, the other placed along the raphe of the perineum. The prognosis is, however, very unfavorable.—*Vienna Letter in New York Medical Record.*

---

### Carbolic Acid in Indigestion

---

MR. J. F. DIXON writes: In reading Dr. Lauder Brunton's lectures in the *British Medical Journal* on indigestion, I have been particularly struck with his remarks on a form of hyperæsthetic pyrosis, or, if I may venture to coin a phrase, subjective acidity. I would presume, in this connection, to call attention to the results of the administration of carbolic acid. I have for a long time particularly noticed its sedative, anæsthetic and curative action on the mucous membrane of the eye; and, by analogy, I was, some time ago, tempted to try it in indigestion associated with tenderness of the stomach, acidity and flatulence. In most instances the result was very striking; cases which had proved very intractable yielding immediately to its influence. I used it of the same strength which I have always used it for the eye, that is, two minims to the ounce of water, usually with the addition of five grains of carbonate of sodium and twenty-five minims of aromatic spirit of ammonia. I have also found it very useful in the dyspepsia of tea-bibber. If any one should be induced to act on this hint, I should be glad to hear the result.

Mr. Edward Berdœ writes: I have lately treated several cases of indigestion with carbolic acid, and the results have in each instance been so fortunate that I am anxious to add the results of my experience to those of Dr. Dixon. I have found it most useful in that form of dyspepsia known as fermentative, accompanied by constant sour risings and eructations of gas, with pains after meals, and discomfort even after drinking milk or cocoa. My attention was first directed to it by Dr. Fenwick, who gave the glycerine of carbolic acid (one part of crystallized carbolic acid to four parts of glycerine). The dose is from five to ten minims in mint-water, or other convenient vehicle. As it mixes well, I think it a more elegant and safe form than a solution of the acid in water only. When there is much pain of the stomach after food, I have found it useful to add five or six minims of the liquor opii sedativus to each dose; and, when there is want of tone in the seat of indigestion, and bad ap-



petite, five to ten minims of the tincture of nux vomica will often be found serviceable. I have found these remedies also very valuable in the above combination in cases of pyrosis, where, I think, the sedative influence of the carbolic acid on the mucous membrane is far more useful than the bismuth one usually gives in such cases. It is an interesting subject of inquiry whether the carbolic acid acts by arresting fermentative changes in the stomach, or by its well-known anæsthetic influence on mucous membranes. I have long given one-grain pills of this remedy in cases of vomiting from various causes, and have rarely found it fail to arrest it. In some of these cases there was no fermentative condition of the contents of the stomach; some of them were cases of reflex vomiting; yet all were, with few exceptions, greatly benefited. It would be desirable that the subject should be still further discussed by those who have had experience of the drug.—*British Medical Journal*.

---

### “Instinct as a Guide to Health.”

---

AN interesting article with the above title appears in the February number of the *Popular Science Monthly*, from the pen of Dr. Felix Oswald. He briefly sketches the hygienic advances which have been made in the last two hundred years, and attributes them, as well as educational and social reforms, to a “restored trust in the competence of our natural instincts;” in other words, “many of the hygienic reforms of the last two hundred years could have been anticipated by the simple teaching of our senses.” Many of the evil manifestations of our natures—the moral depravity of the theologians—are to be regarded not as the remains of “old Adam,” but rather as the expression of abnormal appetites artificially acquired.

Hence, then, true instinct is to be regarded as the guide toward right physiological living. The “ward of instinct,” says Dr. Oswald, does not need a temperance lecture to counsel him to shun alcoholic beverages; the repugnance of nature to such ingesta is unmistakably expressed, and it is only by repeated trampling upon her advice thus expressed that the repugnance is overcome and transformed into an actual longing. The natural movements of the developing child are a greater proof of the necessity of exercise and a more con-

vincing demonstration of its utility than any labored argument to show that exercise is beneficial.

What then has interfered with the establishment of that hygienic Utopia toward which true instinct would long since have led? The answer is, a perversion of instinct, a nursing of unnatural appetites. "In some exceptional cases," says Dr. Oswald, "Nature fails to advise us of perils which her warning could easily avert," and he groups these exceptions under the headings of perverted instincts, abnormal perils and parasitic disorders. The perversion of instinct is often of obscure origin, and when exercised in regard to the ingestion of any poisonous substance may become "vehement and persistent in proportion to the virulence of the poison." Persistent disregard of instinct will often bring about this result. As between instinct and perversion thereof, it becomes a contest for the survival of the fittest, and finally Nature gives up the struggle.

In regard to abnormal perils, "the foresight of instinct" seems to be deceived "in a way typified in the non-repulsiveness of certain mineral poisons. Nature has taken ample precautions to secure her creatures against the poisons of the upper world—hemlock, foxglove, belladonna—but failed to provide safeguards against such subterranean evils as arsenic "

The existence of parasitic disorders seems to go against the theory of the healing instincts of Nature. But the cause of these disorders is generally plainly visible, and can be directly removed, whereas the causes of other ("symptomatic") diseases "is often aggravated by the suppressor of its external manifestations."

One notable exception is mentioned, apparently in opposition to the conservatism of Nature. It is the fact that at certain stages of pulmonary phthisis the sexual instinct is stimulated to a degree hardly compatible with the best results to the organism. Salacious manifestations at the late stage of phthisis are by no means uncommon. Here we are told this tendency comes only in a late and hopeless stage of the disease, when "Nature sacrifices the interests of the individual to those of the species." In such cases as these instinct would not be a true guide. Yet, on the whole, it is to be trusted. The rejection of food by the overloaded stomach, the yielding of the tired body to sleep, the unrest characteristic of lung diseases—and relieved by fresh air—all these, and many others, show how truly the instinct indicates the successful plan of treatment. We are not to believe

that "our protective instincts at the most critical moments become false to their mission, and urgently warn us against the means of salvation."—*Med. Record.*

---

### Surgical Possibilities.

---

BY C. E. NELSON, M.D., OF NEW YORK.

---

QUITE recently, and at the present moment, operations have been performed, which were not attempted formerly, simply because they were thought theoretically to be incompatible with the life of the patient. And an important point in connection with these later operations, is the fact that they can be performed with just as much chance of success by general surgeons as by specialists. It is folly to think that general surgeons do not know how to make an incision, or ligate a vessel, as well as a specialist. There is no doubt whatever but that the tide will turn, and much of what is sent to specialists will find its way back to where it legitimately belongs—namely the experienced general surgeon. I strongly recommend, and urge you who practice in country districts, to cease sending your surgical and gynecological cases to metropolitan centers, but send them to those among you who have established provincial reputations. I assure you, you will not be disappointed as to results. By-and-by, after assisting others in important operations, and after having performed a number of minor operations yourselves, you will very easily get into the way of it, and then be thoroughly able to assist surgically and support each other; this, instead of making a surgical desert of the land, to swell the clinics of ignorant and pretentious specialists. I have seen a good deal of specialist practice, and am convinced that sixty per cent. of it might profitably be left out.

After ovariectomy, formerly, it was thought best not to include the *peritoneum*, in sewing up. I believe my father, the late Dr. R. Nelson, was the first ovariectomist to include the peritoneum.

In the *N. E. Medical Monthly*, number of December 15, p. 132, is an account of the impunity with which one may deal with the peritoneum. Sanger, of Leipzig, on account of intimate adhesions, left a large surface of abdominal wall uncovered by peritoneum. Other German operators have

had a successful result in adopting this practice. This would have been deemed incredible a few years ago.

A few years since, it would have been thought fatal to inadvertently cut an intestine, or the urinary bladder or gall-bladder. Now, resections and operations on intestine and gall-bladder are considered legitimate procedures.

As regards adhesion to the urinary bladder, and cutting into the bladder in ovariectomy, you will see in the *Canada Med. Record*, November number, p. 316, a case related, where, on account of strong adhesion, the bladder was cut to the extent of half an inch by Dr. Trenholme; after removal of the tumor, he sewed up the rent in the bladder, by "a double running suture, of prepared iron silk." The lady made a rapid recovery. This is a very great advance and would have been thought impossible years ago. In this connection, persons do not think, and have not reflected, how the bladder has been incised and left freely exposed to the air (before germs were ever thought of), in lithotomy; and still, the patients recovered, in the hands of good operators.

In the same number, p. 317, Dr. Gardner, also of Montreal, performed double ovariectomy with success. Some years ago, this would have been highly considered.

*Pregnancy after Double Ovariectomy.*—In the December number of this journal, p. 145, Schatz, in Germany, records this fact; the left ovary was completely removed, together with the external portion of the tube; the right ovary was removed "with the exception of a band—only one-twelfth of an inch wide; the right tube being left." Pregnancy after this is certainly remarkable.

*Oophorectomy*, single and double, is without doubt performed much too often, by medical tyros. In *N. Y. Med. Record*, December 12, p. 655, Prof. Ceccherelli states that "pathological changes are present only in exceptional cases."

*Ovarian Hernia.*—The same professor gives a case (*loco citato supra*), where successful herniotomy was performed without resorting to ablation.

*The Adaptation of Nature.*—In the same number of the *Canada Record* mentioned above, in a case of nephrotomy by Dr. Hingston, the kidney, made up of a number of cysts containing albuminous fluid, was found to have lost all trace of ureter, in the renal pelvis or exteriorly.

*Experientia docet* is still true.—*New England Med. Monthly.*



## Microscopy.

HARDENING.—Frank L. James, Ph D., M. D., of St. Louis, is now editing the Microscopical Department of the *St. Louis Medical and Surgical Journal*. We have a number of times transferred to our pages articles by him from the journals to which he contributed. We take liberty now to copy from a recent number of the *St. Louis Med. and Sur. Jour.* several articles by him on the preparation of tissue for microscopical examination. The first is upon *hardening*:

“Most of the preserving agents have also hardening powers, the method of action being about the same in all of them, the variation being in the degree of hardness attained and the length of time required to reach the requisite point. Thus alcohol is by far the best and most useful of the hardening agents for most animal tissues, but when applied to the softer tissues of the lower organisms, by withdrawing the aqueous matter of which they are largely composed, it shrivels and shrinks them so that they are practically worthless for subsequent observation and study. Osmic acid, which in weak solution is a perfect hardening agent for the latter class of tissues, is too slow in its action for the former. No absolute rule can therefore be given as to the choice of a hardening agent. In the great majority of cases, however, alcohol, used as already suggested (*i. e.*, in gradually increased strength) will answer every requirement. When a more rapid effect than that produced by absolute alcohol is desired, the latter may be supplemented by picric acid, which, however, stains as well as hardens. The same may be said of chromic acid, bichromate of potassium and their combinations (as in Mueller’s fluid). The materials and methods used in hardening being so diverse and numerous, we can, at this stage in our work, give only the philosophy and outline of the process, leaving for future explanation the suggestion as to the proper medium to be used for various tissues.

“§ XI. The hardening agents usually resorted to in animal histological researches are :

- a. Heat.
- b. Cold.
- c. Dessication.

d. Chemicals, viz.: alcohol, chromic, picric and osmic acids, etc.

“HEAT—Boiling: There are certain tissues the structure of which is rendered visible by submitting them to the action of heat. Such, for instance, are the branched muscular fibers of the frog’s tongue, the fibers of the crystalline lens, etc. The object to be examined is put into a large test tube, covered with distilled water and boiled for a few moments over the flame of an alcohol lamp, or in a water bath. This method was formerly much in vogue, especially among English microscopists, but it is now rarely resorted to. If, however, one is pressed for time and desires merely to differentiate certain elements in the structure of material, such as that referred to, it affords a quick and ready means of so doing—the word differentiate being used in a limited sense, as no one, even a novice, can believe that the true histological features of any structure can remain unaltered after being submitted to an agent or process so destructive to life and living matter.

“COLD—Freezing: It is but a very few years since German histologists and investigators maintained that material which had undergone the processes of hardening by heat or chemicals, gave results, when examined under the microscope, that were altogether unreliable and misleading. These teachers advocated the process of hardening by freezing and declared that frozen sections of fresh material were the only ones in which the true histological elements and conditions could be observed and studied. Of late, however, those who advocated the freezing process most strenuously, have found that it produces abnormalities quite as numerous and as serious as does hardening by chemicals, and that it has little to offer in return for the many advantages of which it deprives us. There are, however, circumstances under which it may be advantageously resorted to, and most of the modern microtomes (section cutters) are provided with freezing devices. In the absence of special contrivances the material may be frozen sufficiently hard for all practical purposes by immersing it (contained in a test tube) in any of the well-known freezing mixtures, of which the following are the best:

“1. Snow or powdered ice, 12 parts; nitrate of ammonium and chloride of sodium, each, 5 parts. This will lower the temperature from any point to 25° below zero, F.

"2. Snow or powdered ice, 4 parts; crystallized chloride of calcium, 6 parts. This will cause a depression of the temperature  $82^{\circ}$  F. from any point above zero (the actual depression below this point being not quite so much, though very nearly so).

"3. Equal parts of nitrate of ammonium, carbonate of sodium and water. This lowers the temperature  $57^{\circ}$  F. from any point.

"CHEMICAL MEDIA. By far the most useful and generally applicable of these is ALCOHOL, used as described in Chapter I., for preserving purposes. The range of animal textures to which this agent is applicable is limited only by the fact that it renders albuminous tissues, otherwise transparent, opaque and granular, and that it precipitates albumen from solutions. Its avidity for water and consequent shriveling action on delicate tissues has already been noted.

"ANHYDROUS GLYCERINE will harden many tissues very nicely, but its action is comparatively slow, and to obtain a satisfactory result the glycerine must be kept in an air-tight vessel and changed frequently.

"The brain, spinal cord and such tissues are hardened very beautifully by immersion in solutions of CHROMIC ACID, the chromate and bichromate of potassium, and mixtures containing these chemicals, such as Mueller's and other solutions.

"PICRIC ACID is another hardening agent of a wide range of usefulness. It is used in either alcoholic or aqueous solution, or as an ingredient in complex hardening fluids, such as Kleinenberg's. If used in water, the solution should be saturated, since it is but sparingly soluble in that medium. For the same reason the bulk of the solution should be large in proportion to that of the material. When dissolved in alcohol the percentage may be varied according to the rapidity of the desired effect.

"OSMIC ACID. To those whose studies lie among the lower forms of animal and vegetable life this chemical is one of the most valuable in the whole list of hardening agents. Its application not only kills those organisms, but it does instantly and without distortion. It preserves the tissues indefinitely, and by its selective staining property (which will hereafter be alluded to in its proper place) it brings out features that would otherwise escape observation. It should be used in solution not stronger than one per cent., and this solution should be kept absolutely protected from the action

of the light. I use for this purpose a glass-stoppered bottle, thickly painted with drop black and afterward covered with heavy tin or lead foil. The whole should be placed in a closely covered metallic box (a yeast powder can is the very thing). In preparing this solution the following precautions should be observed: Clean the bottle which is to hold it, in the most perfect manner, rinsing frequently with distilled water. Clean also in the same manner the outside of the glass tube in which the osmic acid is found in commerce. Weigh the distilled water or measure it carefully, pour it into the prepared bottle, and then drop the tube of osmic acid into it. Put in the stopper and shake the vessel sharply until the glass tube is fractured and the water allowed to reach the acid. Even when thus prepared the solution is prone to decompose and must be made afresh quite frequently. Specimens to be hardened in this agent should be cut up quite small—a rule by the way, that holds good with all other agents, and put into the vessel prepared as suggested above for the exclusion of light. The period required for hardening varies according to the object."

---

## Gleanings.

---

TREATMENT OF ECZEMA.—An intelligent knowledge of the principles upon which treatment should be based always suggests the form of treatment that will be applicable to each case regardless of its name or location. The pathological condition being absolutely identical in no two cases, so the treatment must always vary, and a knowledge of special lines of treatment or combinations of drugs said to be useful, with a neglect of consideration of principles upon which treatment should be based in each individual case, in this, as in all other diseases, is liable to mislead. Therapeutically speaking, the disease is always acute, subacute or chronic, regardless of its clinical name or location, and the treatment must be arranged accordingly. In the acute, as in all other acute inflammations, the great principle necessarily involved is *rest*, which implies not only quietude of the member or part, but *rest from all irritating influence*, as scratching, irritation of lice, friction, dirt incident to the calling of the individual, too frequent washing, etc. Soothing and protecting



measures, therefore, are indicated in this stage, among which may be mentioned Carron oil, poultices, etc. In the subacute, as in all other stages and forms, scratching must be strictly prohibited, as it is the most fruitful of all sources of aggravation. In this and the chronic conditions (either of which may at any time develop acute symptoms and require the treatment changed accordingly) pure, impalpably fine boracic acid may be used as a dusting powder, having first gotten rid of the crusts and scales by soaking with oil and washing with soap and warm water. In the chronic, however, greater stimulating measures are to be employed, in the way of green soap frequently rubbed in during washing. To relieve intense itching, there is nothing so effectual as a first-class letting alone. As certain constitutional conditions predispose to the disease, and therefore necessarily aggravate or prolong it when once established, these conditions must be sought after and corrected.—*Henry G. Reynolds, Chicago, in American Practitioner.*

**SMALLPOX.**—Dr. J. M. Jackson (*Mississippi Valley Med. Monthly*) says: When called to a case of smallpox, I always proceed to vaccinate at once, and at the same time clear out the alimentary canal with saline cathartics as early as practicable. To break down congestion by equalizing circulation, and at the same time to counteract the much dreaded septicæmia, I administer quinine in five grain doses, to be repeated every four or five hours. Quinine is not only our most effective remedy against congestion, but it is one of our best antiseptics.

As soon as the pustules are developed, I take a hypodermic syringe and aspirate the lymph or pus, as the case may be, from time to time, from the pustules. By this means I prevent the absorption of the greater portion of the pus, and thereby prevent in a great measure the formidable and fatal effects of blood-poisoning, in consequence of which we find the alarming symptoms of depression of the vital powers and secondary fever.

The question comes up, Can the duration of smallpox be cut short by this means? I answer, yes, and materially so. In my practice I am satisfied the duration of the disease has been shortened five or six days, and even during its continuance, all the most alarming symptoms have been greatly ameliorated. I, at the same time, apply a mixture of olive oil and carbolic acid, consisting of ten parts of the former and

one of the latter, over the whole pustulated surface. This can be done with a soft swab, or, perhaps, better with a large feather.—*Medical Bulletin*.

---

## Book Notices

---

### A HAND-BOOK ON THE DISEASES OF THE NERVOUS SYSTEM.

By James Ross, M.D., F.R.C.P., LL.D., Senior Assistant Physician to the Manchester Royal Infirmary, etc. Octavo. Pp. 726. 184 Illustrations. Cloth, \$4.50; Leather, \$5.50. Philadelphia: Lea Brothers & Co. Cincinnati: R. Clarke & Co. 1885.

This hand-book, the author states, is intended for the use of students and such physicians as are so fully occupied in practice that little time is left them for reading lengthy treatises and monographs on special subjects. The work is divided into two parts—a general and special neurology. In the former he has endeavored to give a brief outline of the evolution and dissolution of nervous structures and functions. In the special part his aim has been to make the work thoroughly practical. With this view, he has adopted, as far as possible, a clinical classification, so that the diseases which are most apt to be mistaken for each other will be found described in close proximity, and the reader can thus note the various features which differentiate nervous diseases clinically aided. The part of the work devoted to special pathology of the nervous system is divided into twenty-two chapters, in which is embraced the consideration of all the prominent diseases of the nervous system. Of course, in a work of this kind, although resulting from diseases of the brain, the various forms of insanity are not treated. Affections of the mind are better relegated to works that are devoted to them specially. In Chapter I. the general diseases of the peripheral nerves are described; in Chapter II., disorders of common sensation and of special sense are discussed, and in this chapter all of the forms of neuralgia are treated, as trigeminal or neuralgia of the fifth nerve, cervico-occipital, phrenic, cervico-brachial, dorso-intercostal, lumbar neuralgia, etc. In other chapters the author reviews spasmodic disorders, vascular diseases of the spinal cord, the varieties of myelitis, diseases of the

spinal membranes, vascular diseases of the brain, encephalitis, atrophy, hypertrophy and tumors of the brain, aphasia, paralysis, paralysis agitans, and many other affections of the nervous system.

Although diseases of the nervous system form no small part of the affections which a physician is called upon to treat, yet works upon them are not near so numerous as are those which are devoted to other forms of diseases. The work before us treats of the morbid conditions of the nervous system in a very lucid and practical manner, and should be in the library of every physician.

---

THE FIELD AND LIMITATION OF THE OPERATIVE SURGERY OF THE HUMAN BRAIN. By John B. Roberts, A.M., M.D., Professor of Anatomy and Surgery in the Philadelphia Polyclinic, Surgeon to St. Mary's Hospital. 8vo. Pp. 80. Cloth, \$1.25. Philadelphia: P. Blakiston, Son & Co. Cincinnati: R. Clarke & Co. 1885.

Nine years ago the author says that, while resident physician of a Philadelphia hospital, he watched a man die after a fracture of the cranium, and found at the autopsy, immediately under the fracture, a cerebral abscess, from the surface of which was extracted a piece of bone driven in at the time of injury. He had seen the vigorous man admitted; seen him first intelligent, scarcely sick, perhaps; then confused and delirious; then comatose, and finally dead. It took, he said, little surgical experience to recognize the lamentable result of the inactive, so-called conservative, treatment, which almost to a certainty sacrificed the patient's life.

The recollection of this case, and of similar ones, has specially directed his attention to the importance of cerebral surgery.

The author, having thus had his attention drawn to cerebral surgery, has given the subject special study since. That his researches have led to important results we feel sure that an examination of this little work will show. There is no doubt that very often lives are sacrificed in the case of injuries of the brain by following the conservative or expectant modes of treatment—waiting to observe what symptoms will arise after a time. Our author points out what surgical proceedings should be instituted immediately, when the brain has been involved under certain circum-

stances—taught as he has been by observation and experience—and thus may the surgeon often be relieved from the feeling of helplessness which he experiences when called to a case of cerebral injury.

Dr. Roberts emphasizes the importance of cerebral localization, considering that the results of the study of it are more important to the conscientious surgeon than to the neurologist.

---

GUIDE TO THE EXAMINATION OF URINE, WITH SPECIAL REFERENCE TO THE DISEASES OF THE URINARY APPARATUS. By K. B. Hoffman, Professor at the University of Graz and R. Ultzmann, Docent at the University of Vienna. Second Edition. Translated and Edited by F. Forchheimer, M.D., Professor of Physiology at the Medical College of Ohio, Cincinnati. With Illustrations. 12mo. Pp. 251. Cloth, \$1.50. Cincinnati: Woodruff, Cox & Co. 1886.

The translator informs us that he has been induced to bring this little work before the profession of this country in consequence of the fact that it is very popular on the Continent, and that it is nearly universally used in the German high-schools. It is not intended, he states, for the physiological chemist, nor for him who is going to make animal chemistry a specialty, nor to take the place of larger works, but it is destined for the student and physician for use in practice.

We have never met with a work of its class that seemed to us to be so well adapted for the use of the general practitioner. All the principal points in urinary analysis are set forth in a very plain, systematic manner, so that, with it in hand as a guide, any physician, with the usual knowledge of chemistry and possessing a microscope, will be able to make a sufficient examination of the urine for all ordinary clinical purposes. At the present day there is no physician, in treating a case, who can dispense with the information afforded by the urine. A work, therefore, that systematizes and simplifies the method of gaining a competent knowledge of urinary analysis will fill a recognized want.

Dr. Forchheimer's Translation has reached a second edition. The greater part of it, he says, has been entirely rewritten. New notes have been added, and other improvements made. The first edition having met with flat-



tering success, there is reason to believe that the popularity of the work will be maintained by the improvements made in this second edition. An index has been attached, which will make it easy to refer to any subject.

A MANUAL OF AUSCULTATION AND PERCUSSION, EMBRACING THE PHYSICAL DIAGNOSIS OF DISEASES OF THE LUNGS AND HEART, AND OF THORACIC ANEURISM. By Austin Flint, M.D., LL.D., Professor of the Principles and Practice of Medicine and Clinical Medicine in the Bellevue Hospital Medical College, etc. Fourth Edition, Thoroughly Revised and Enlarged. Illustrated with Fourteen Wood-cuts. 12mo. Pp. 280. Cloth, \$1.63. Philadelphia: Lea Brothers & Co. Cincinnati: R. Clarke & Co. 1885.

Dr. Austin Flint, Sr., as a medical writer, is well known throughout this country. His Practice of Medicine is to be found upon the book shelves of physicians North, South, East and West. A person on entering a doctor's office in some far-off settlement, outside of the limits of civilization, will probably find a copy of Flint's Practice. A medical writer, therefore, who is so generally and favorably known, needs no commendation of any of his works.

No one will gainsay the assertion that a person is incompetent to practice medicine who is not sufficiently versed in auscultation and percussion to detect important morbid changes in the lungs or heart. But to obtain such proficiency requires study—study independent of merely listening to lectures or demonstrations.

We do not wish to disparage the value of lectures in imparting a knowledge of physical diagnosis. They render great assistance; but the student needs a first-class textbook in which the subject is plainly and fully explained for him to study. Dr. Flint's work is just such a book. It contains the substance of the lessons which the author has for many years given in connection with practical instruction in auscultation and percussion, to private classes composed of medical students and practitioners. The fact that, within a little more than two years, a large edition of this manual has been exhausted, is proof of the favor with which it is regarded by the medical profession. In 1880 the second edition was issued—now, at the beginning of 1886, the fourth edition is published, made more acceptable than ever by a thorough revision.

## Editorial.

### Ninth International Medical Congress.

*To be Held in Washington, D. C., in September, 1887.*

#### PRELIMINARY ORGANIZATION.—RULES AND GENERAL OFFICERS.

##### *List of Officers Nominated for Election by the Congress.*

*President of the Congress*, Austin Flint, M.D., LL.D., New York.

*Vice-Presidents of the Congress*: W. O. Baldwin, M.D., Montgomery, Ala.; Wm. Brodie, M.D., Detroit, Mich.; W. W. Dawson, Cincinnati, O.; E. M. Moore, M.D., Rochester, N. Y.; Tobias G. Richardson, M.D., New Orleans, La.; Lewis A. Sayre, M.D., New York, N. Y.; The Supervising Surgeon-General of the United States Marine Hospital Service; J. M. Toner, M. D., Washington, D. C., The President of the American Medical Association; The Surgeon-General of the United States Army; The Surgeon-General of the United States Navy.

*Secretary-General of the Congress*, Nathan S. Davis, M.D., LL.D., Chicago, Ill.

*Associate Secretary-General*, Frederic S. Dennis, M.D., New York, N. Y.

*Treasurer of the Congress*, E. S. F. Arnold, M.D., New York, N. Y.

*Chairman of the Finance Committee*, Richard J. Dunglison, M.D., Philadelphia.

*Executive Committee of the Congress*: Henry H. Smith, M.D., Philadelphia, Penn., Chairman; Austin Flint, M.D., LL.D., E. S. F. Arnold, M.D., Richard J. Dunglison, M. D., Wm. T. Briggs, M.D., Wm. H. Pancoast, M.D., A. W. Calhoun, M.D., A. R. Robinson, M.D., Henry O. Marcy, M.D., Jonathan Taft, M.D., Nathan S. Davis, M. D., LL.D., Frederic S. Dennis, M.D., Abram B. Arnold, M.D., Delaskie Miller, M. D., F. H. Terrill, M.D., J. Lewis Smith, M. D., Sam'l J. Jones, M.D., LL.D., Joseph Jones, M.D., John P. Gray, M.D., LL.D.

*Local Reception Committee*: A. Y. P. Garnett, M.D., Washington, D. C., Chairman; The Surgeon-General of U. S. Army, The Supervising Surgeon-General of U. S. Marine Hospital Service, C. H. A. Kleinschmidt, M.D., J. M.

Toner, M.D., The Surgeon-General of U. S. Navy, J. H. Baxter, M.D., U. S. Army, N. S. Lincoln, M.D. With power to increase the number of its members.

#### RULES.

1. The Congress shall consist of members of the regular profession of medicine, who shall have inscribed their names on the register, and shall have taken out their tickets of admission; and of such other scientific men as the Executive Committee of the Congress may see fit to admit.

2. The dues for members of the Congress shall be ten dollars each for members residing in the United States.

There shall be no dues for members residing in foreign countries.

Each member of the Congress shall be entitled to receive a copy of the "Transactions" for 1887.

3. The Congress shall be divided as follows, into seventeen Sections:

- I. General Medicine.
- II. General Surgery.
- III. Military and Naval Surgery.
- IV. Obstetrics.
- V. Gynæcology.
- VI. Therapeutics and Materia Medica.
- VII. Anatomy.
- VIII. Physiology.
- IX. Pathology.
- X. Diseases of Children.
- XI. Ophthalmology.
- XII. Otology and Laryngology.
- XIII. Dermatology and Syphilis.
- XIV. Public and International Hygiene.
- XV. Collective Investigation, Nomenclature, Vital Statistics, and Climatology.
- XVI. Psychological Medicine and Diseases of the Nervous System.
- XVII. Dental and Oral Surgery.

4. The general meetings of the Congress shall be for the transaction of business, and for addresses and communications of general scientific interest.

5. Questions and topics that have been agreed upon for discussion in the Sections shall be introduced by members previously designated by the titular officers of each Section. Members who shall have been appointed to open discussions

shall present in advance statements of the conclusions which they have formed as a basis for debate.

6. Brief abstracts of papers to be read in the Sections shall be sent to the Secretaries of the proper Sections on or before April 30, 1887. These abstracts shall be treated as confidential communications, and shall not be published before the meeting of the Congress.

Papers relating to topics not included in the lists of subjects proposed by the Officers of the Sections may be accepted after April 30, 1887; and any member wishing to introduce a topic not on the regular lists of subjects for discussion shall give notice of the same to the Secretary-General at least twenty-one days before the opening of the Congress, and such notices shall be promptly transmitted by the Secretary-General to the Presidents of the proper Sections. The titular officers of each Section shall decide as to the acceptance of such proposed communications, and the time for their presentation.

7. All formal addresses, scientific communications and papers presented, and scientific discussions held at the general meetings of the Congress, shall be promptly given in writing to the Secretary-General; and all papers presented and discussions held at the meetings of the Sections shall be promptly given in writing to the Secretaries of the proper Sections.

No communication shall be received which has already been published or read before a society.

The Executive Committee, after the final adjournment of the Congress, shall direct the editing and the publication of its "Transactions," and shall have full power to publish the papers presented and the discussions held thereon, either in full, in part, or in abstract, as in the judgment of the Committee may be deemed best.

8. The official languages of the Congress shall be English, French and German.

In the meetings of the Sections no member shall be allowed to speak for more than ten minutes, with the exception of the readers of papers and those who introduce subjects for discussion, who may each occupy twenty minutes.

9. The rules and programmes shall be published in English, French and German.

Each paper and address shall be printed in the "Transactions" in the language in which it was presented, and



preliminary abstracts of papers and addresses also shall be printed, each in the language in which it is to be delivered.

All discussions shall be printed in English.

10. The President of the Congress, the Secretary-General, the Treasurer, the Chairman of the Finance Committee and the Presidents of the Sections shall together constitute an Executive Committee of the Congress, which Committee shall direct the business of the Congress, shall authorize all expenditures for the immediate purposes of the Congress, shall supervise and audit the accounts of the Treasurer, and shall fill all vacancies in the offices of the Congress and of the Sections. This Committee shall have power to add to its membership, but the total number of members shall not exceed thirty. A number equal to one-third of the members of the Committee shall constitute a quorum for the transaction of business.

11. The officers of the Congress shall be a President, Vice-Presidents, a Secretary-General, four Associate Secretaries, one of whom shall be the French Secretary, and one of whom shall be the German Secretary, a Treasurer, and the Chairman of the Finance Committee.

12. The officers of each Section shall be a President, Vice-Presidents, Secretaries and a Council.

13. The officers of the Congress and the officers of the Sections shall be nominated to the Congress at the opening of its first session.

---

CINCINNATI SANITARIUM.—We have received the twelfth annual report of this institution. We are pleased to learn that Dr. Orpheus Everts, the Superintendent, announces continued prosperity. Although the general business prosperity throughout the country, for more than a year past, has been depressed, yet there have been thirty more admissions during the year embraced in the report than during any previous year since the Sanitarium was opened in 1873. This is certainly a good showing and argues well, as is stated, for the position occupied by the institution in the estimation of the people and the medical profession.

Dr. Everts holds a high position as an alienist, and no one certainly is more competent to treat affections of the mind than he. Since he has been at the head of the Sanitarium, no institution of its kind in this country has occupied a higher rank and had more the confidence of physicians and

people. The Doctor has written much on the various forms of insanity, and is regarded as an authority upon psychological subjects.

The number of patients at the beginning of the year was 57; the number admitted during the year, 165. There were discharged, recovered, 103; improved, 20; unimproved, 31; died, 11. Daily average under treatment, 58.72.

The Sanitarium is located on the suburban height, a few miles north of Cincinnati, known as College Hill; amidst the most picturesque scenery of the Ohio Valley, 500 feet above the level of the Ohio River. It consists of one large three-story and basement brick building, recently enlarged and of modern architecture, four detached cottages and capacious amusement hall, billiard-room and conservatory—all warmed by steam and lighted with gas. The buildings are all comfortably, and some apartments quite elegantly furnished. There is no healthier location in the country. Malarial diseases never occur in the neighborhood. Access is easy from the city by rail—the Sanitarium being a station upon C., H. & D. R. R.

---

**CEREBRAL LOCALIZATION.**—Prof. J. B. Roberts, in his work upon “Operative Surgery of the Brain,” just published by Blakiston, Son & Co., of Philadelphia, makes the following statements in regard to localization: Deafness in one ear or hallucinations of hearing on one side (such as voices and music) indicate disease of the first temporo-sphenoidal convolution of the opposite side. Failure to recognize or remember spoken language indicates lesion of the left first temporo-sphenoidal convolution in right-handed persons, and of the first temporo-sphenoidal convolution in left-handed persons.

Loss or hallucination of smell possibly indicates disease at the base of the brain, in the temporo-sphenoidal region.

Loss of taste has not been sufficiently studied to afford even the suggestive evidence we possess about the disturbances of smell.

Disturbances of conscious mental actions, such as judgment, reason and self-control, will be exhibited in changed disposition and character of the patient. Such change, if no other general or localizing symptoms exist, indicates disease of the frontal lobes.

Disturbance in speech power indicates disease in the

neighborhood of the fissure of Sylvius on the left side in right-handed persons; on the right side in left-handed persons. Neurologists distinguish three kinds of aphasia—sensory aphasia, motor aphasia, aphasia of inco-ordination. Each of these aphasias has its center, according to Dr. Roberts. The center of motor aphasia, which has to do with the memory of voluntary acts necessary to speech, has its center situated in the posterior part of third frontal convolution and lower part of central region (ascending frontal convolution).

If a person can not recognize spoken language, but is able to repeat words after another person, or can use exclamations on being annoyed, he has sensory aphasia, which indicates disease in the first temporo-sphenoidal convolution.

If he can understand and talk, but puts an unexpected word for the one desired, he has aphasia of inco-ordination, which indicates disease situated deeply within the Sylvian fissure, or in the island of Reil and the white substance thereabouts, and involving the association fibers.

If the patient understands a question and can recall the words for a reply, but can not make the requisite speech movements, he has motor aphasia, which indicates disease in the third frontal and lower end of the ascending frontal convolutions.

Anesthesia of face, arm and leg (hemi-anesthesia) would indicate destructive lesion of the lower, middle and upper thirds of the central region, probably situated behind the fissure of Rolando, and in the parietal convolutions; and hyperesthesia of the same cutaneous tracts irritative lesion of all three portions of the central region, probably situated behind the fissure of Rolando, and in the parietal convolutions.

---

THE COMING MEETING OF THE AMERICAN MEDICAL ASSOCIATION IN ST. LOUIS.—On the second Tuesday in May next the American Medical Association will hold its annual meeting in St. Louis. The local Committee of Arrangements is pressing forward preparations for the meeting; and the profession may feel certain that nothing will be left undone to secure the convenience and comfort of the members, to facilitate the work of the committees and sections, and to make the meeting in every way pleasant and profitable.

There are many reasons why this meeting should be very

largely attended. This will be one of the most important meetings in the history of the Association. The future prosperity of this, the only organization which stands in a position to act for the profession of the whole country, depends very largely upon the course that shall be pursued at the coming annual meeting.

We can not too strongly urge upon our readers the importance of the obligation which rests upon them as members of the medical profession to exert all the influence which they can bring to bear to secure the success of the coming meeting in St. Louis. See to it in all parts of the country that the ablest, most judicious, wisest and strongest men of the profession are chosen as delegates to the American Medical Association. Let such men make the necessary sacrifice of personal comfort and interest for the good of the whole profession, and demonstrate that the profession of the United States can and will maintain an association whose work shall truly represent its ability and strength. Come in such numbers and with such spirit and enthusiasm as shall prove that the Association is neither dead nor dying. Put in the front as leaders men who will command the respect and implicit confidence of every member of the medical profession, men whose leadership all will cheerfully follow. Let those who for some few years now have neglected to attend the meetings of the Association, and have withheld their support and counsel, return to their duty and loyalty, and in this time of danger give their aid to carry the Association to a triumphant success and a glorious future. Some questions must come before this coming meeting which will need most judicious and wise management.

---

OVERWORK AS RELATED TO INSANITY.—We have received a pamphlet thus entitled, by Dr. O. Everts, of the Cincinnati Sanitarium. The doctor states that while "overwork," as he defines it, is a cause, immediate or remote, of pathological conditions manifested by mental disorder of every variety, yet as popularly construed—the voluntary exertion of natural capabilities referred, not to the activities of material mechanisms subject to physiological laws and limitations, but to mental capabilities, of a hypothetical, immaterial entity called "*the mind*"—it is not a supreme factor in the causation of insanity. "Work," he says, "is limited by natural exhaustion within the bounds of structural integrity.



A weary muscle contracts with constantly diminishing energy. A weary brain thinks but sluggishly. It is only by stimulation that structures thus limited can be made to perform functions at the expense of their own integrity. Work, under such circumstances, becomes 'overwork,' the relations of which to the mechanisms implicated may become pathological."

We are of the opinion ourselves that in the larger number of cases in which insanity has followed upon hard study, great devotion to business, etc., intemperance has been a prominent factor.

But we have neither space nor time to give even a mere outline of Dr. Evert's interesting paper. Those interested in the subject, and desiring to be informed in regard to his views, should write to him, at College Hill, for a copy of his pamphlet. A number of interesting cases are detailed in support of his position.

---

HAMBURG TEA.—The *New England Medical Monthly* says that the formula of this preparation is as follows: Senna Leaves, ℥viii; Manna, ℥iv, Coriander Seed, ℥i. M.

---

THE PEACOCK CHEMICAL CO.'S PREPARATIONS.—In our advertising form will be found the advertisement of the Peacock Chemical Co., of St. Louis. The preparations of this company have obtained a high standing. We, below, give extracts from letters of a couple of physicians who have made use of some of them in their practice.

"I have used Peacock's Bromides in my practice with success. A little girl, 12 years old, had been afflicted with epilepsy since she was three months old, having epileptic convulsions nearly every day, until I put her on Peacock's Bromides. Since then she has not even had a symptom of one. *It is surely a great remedy.*

"HAZLEHURST, Ga.                      JEFFERSON WILCOX, M.D."

"I take much pleasure in bearing testimony to the remedial effects of Peacock's Fucus Marina. I am better pleased with its action than anything that I have ever used as an antidote to malarial poisoning.

"KEYSBURG, Ky.                      J. T. HERNDON, M.D."

# THE CINCINNATI MEDICAL NEWS.

VOL. XIX. No. 218. }  
Old Series.

MARCH, 1886.

{ VOL. XV. No. 3.  
New Series.

## Original Contributions.

### Some More Recent Experiences With the Topical Uses of Earths.

BY ADDINELL HEWSON, A. M., M. D., OF PHILADELPHIA.

Read before the Medical Society of the State of Pennsylvania.

It is now over sixteen years since I began the study of the uses of earths as topical applications.

Those studies were at first directed to the uses of earths as *disinfectants* and were consequent, on results demonstrated long before, and made known by others. My earliest results in that direction were clearly associated with the manifestation of positively *antiseptic* properties in the same classes of (clay) earths, and with these effects I speedily detected those of an antiphlogistic character, and with them followed the detection of those of an antipyuric and of an antimorbific nature. These numerous effects may seem to some not only strange, but absolutely impossible; and yet there is no incompatibility or incongruity between them. For the best authorities of the present day, even those who have been most zealous and industrious in search of *bacilli*, declare most positively that inflammatory action is more or less essential to all kinds of disease or unhealthy states. The fact that an article, or, even more positively, that an agent, should be directly antagonistic to one abnormal state, like that of septicæmia, is presumptive evidence that it bears a like relation to the atmosphere, and then to the production of pyæmia or other

morbific states in individual cases, especially in which there are proclivities or constitutional dispositions to such.

The range which my studies had to take under such circumstances was very extensive; but I never allowed that fact to interfere with the thorough manner in which I pursued them. On the contrary, I have taken up each effect as it has presented itself under the most individual or characteristic circumstances. I have so had them all impressed on my own mind in a most effectual manner.

The first object with me was, of course, to make my collection of facts—*pro* and *con*—as complete as possible, and then add to that without any other discriminations than those indicated in a clear and positive manner by themselves. I had, therefore, to expose myself to all sorts of sneering, and of insinuations of using earths as panaceas; but, if I had done otherwise than as I did, there would have been equally as much fault found for want of completeness and thoroughness in my researches.

I had also to determine, by full trials, the value of the various kinds of earths for my purposes. Here there were likewise sources for fault-finding which were recognized by myself, and the mode of avoiding them was as promptly determined by using only clean, yellow clay, free of all sand or grit; but, although I have on all occasions pointed out, and even insisted upon, the importance of such a selection of material, yet the carpers were not to be satisfied—they *must* find fault, and that, too, without recognizing the fact that such faults could be with themselves. A man who would not look, for the reason that he wished to be able to say that he had never seen anything produced by the use of earth, may satisfy his own mind; but *his* mind must, indeed, be very weak, or his self-conceit very great! No one but one like him would wish his or anybody else's *dixit* to be accepted as infallible.

The very early recognition of those different powers of earths which I have enumerated, and of the effects of which I have preserved records, photographs, tracings, and other representations, now enables me to speak with that distinctness and definiteness which are always desirable.

In proof that I have pursued such a course, I need only to refer to any of the various publications which I have made relating to this subject. Thus, in the address I prepared and delivered by request before the Delaware County Medical Society in the autumn of 1874, I very cautiously

expressed myself (then with five years' experience) of uses of earths of which now (with eleven years' more recent experience) I am readily able to speak with the utmost positiveness, and the most perfect freedom from fear of even being gainsayed in regard to those points.

That same caution as to what I did say then, now finds me with nothing to retract, but with every reason to hold to all I have published. For the like purpose I shall confine this communication to my experiences with the applications of earth in erysipelas and smallpox, measles and scarlet fever.

In the classifications of these eruptive skin disease cases, I have always had to be exceedingly careful in designating them, and announcing them by definite diagnosis. This difficulty has, however, rather increased than diminished with the widening of my opportunities.

Every one knows that such diseases as scarlet fever, measles and the like, are most difficult to be recognized and distinguished one from the other in their earliest or initiatory stages, and adding to this difficulty the blighting effects on those eruptions which have followed in my hands with the use of powdered earth, every one can recognize a source of increase of difficulty in my later, compared with my earlier, experiences. Thus, with the later cases, I was in duty bound to use the earth immediately for the relief I knew it would afford the patient; whereas in my earliest cases, it was not so well defined, and I had to hesitate, and was so afforded the time to effect my diagnosis. Then, in the later, I was called directly to take charge, whereas in the former, the mode of my seeing them was by consultation, in consequence of my success with the clay having become known in the neighborhood.

My more recent cases of scarlet fever and measles have often come to me in large groups from schools, either private or public. The introduction of such diseases by pupils returning to their schools when convalescent and in a state capable of giving their disease to those who were most directly associated with them, or even of infecting school-rooms, soon developed a marked contrast between those patients and mine of the same school who were not only a shorter time away, but found themselves thoroughly free, when they did return, from all capability of communicating the disease to those who had never had it.

In one of these instances of school epidemics which oc-



curred in a primary division, where many of the boys were in petticoats, one of the pupils had been absent between eighteen and nineteen days, and on coming back informed his teacher that he had had measles. This teacher was an old maid, who was familiar with his doctor—a homœopath—and went to see him on the afternoon of the day of the boy's return. She learned directly from that doctor that the boy had had a very bad attack of measles of an undoubted nature, but that his medicines had been so effectual that they had cut short the disease and rendered the patient incapable of propagating it.

My patient, on this occasion, was the second of three boys in a family where I have been physician many years. He and his older brother were some time previously thought to have had the measles, and his mother felt some security about his having another attack. Ten days after the return to school of his companion, my patient complained of pains, sore throat, earache and cough. About three days later the eruption was well defined, and I was called in to take charge of him; his mother explaining the delay in calling me by the fact that she believed he had had measles in their old home, and she felt him safe from another attack. She had her youngest child, a boy baby at this time, at the breast, and when I spoke of isolating the other, she said she must be with the baby, and she would not allow any one to fill her place with the sick boy. Her mind was very determined in this respect, and I gave up all discussion, with the assurance from her that she understood me, and would never censure me if anything should happen to the baby. The keeping of the other boy out of the sick-room was faithfully observed. My patient's pulse and temperature were both at that time much increased in frequency, and indicated a decided *febrile* state. Reverting again to the idea that he had had both measles and scarlet fever, I sought for the symptom so much insisted on by Dr. J. M. Keating in his communication to the College of Physicians of Philadelphia, June 7, 1872, and found it absent; for this boy's zygomatic arch had not become effaced by the swelling, as it should have been if the case was one of true measles. I directed him to use the powdered earth. On my visit the next day the swelling was reduced very positively, and there was no pain or itching. This lad was very refractory and hard to manage, and I scarcely thought his case a fair one to count on. Before he reached the end of

his first week, his eruption had faded without full desquamation; on the contrary, its appearance then favored the idea of its being a less serious disease. His baby brother was then beginning to suffer with coryza and a like group of initiatory symptoms to those which he had brought home. His classmates, within ten days after his return to school, also came back, none of them, however, with any notion that their disease had been anything else than true measles. And yet this baby's case of mine in its sequences made it more than ever probable that the disease with all had been nothing more than Rôtheln or German measles; for his attack proved to be no protection against true measles shortly afterward. The same occurring, also, with many of the pupils at a later date to my expressing such an opinion, led their parents to call on me for some knowledge on the subject.

In all cases of these four diseases which have fallen under my care since 1872, I have, without discrimination, always used applications of clay, and following these applications I have always noticed:—

*First.*—A direct and rapid reduction of temperature.

*Secondly.*—An allaying or, more positively, a dissipation of pain or distressing local sensations which belong to each of these diseases.

*Thirdly.*—A diminution of the duration which is characteristic of each.

*Fourthly.*—The allaying of the intensity of the general or constitutional symptoms belonging to each.

*Fifthly.*—The prevention of the complications which occur so frequently as to have long been recognized as characteristic of each special disease.

*Sixthly.*—The destruction of all contagiousness and power of propagation of each.

It is but right that I should here state my mode of application, which will explain my association of measles with scarlet fever and smallpox with erysipelas. Thus, in the various forms of scarlatina and rubeola, as well as German and French measles, I have always pursued the plan of dusting the powdered earth all over the cutaneous surface. There has always followed a rapid reduction of temperature, as shown by the thermometer in the patient's mouth as well as in the axilla or groin. This reduction has generally been about 5° Fahrenheit when those diseases were in the stages of invasion, and 10°, or even as much as 15°, when the ap-

plications of the earth were not made until those diseases had progressed beyond that stage.

In erysipelas and smallpox, I have always applied the clay directly to the skin in the form of a smooth paste, made by mixing it freely with water in a glass or china mug by means of a wooden spatula, for the reason that I wished it to hold fast and constantly to the part; a result which is always commensurate to the full whipping given to the paste. The water is here so rapidly devoured by the earth that there is always at first a marked increase of temperature of the dressing. This warmth, which is appreciable by the patient as well as by the attendant who has made the application, lasts over an hour; indeed, until the clay has become dry.

Allowing for the difference due to the mode of application, my results show a most positive and continuous reduction of temperature following the application.

The preliminary temperature—that taken before the first dressing was applied—has always been recognized by me as indicative of the severity of the disease according to its stage; and I have always been satisfied with that taken at the end of the first twenty-four hours as showing the effects of the earth on the disease—the greater reduction showing the greater destruction of the morbid process, or of its influence on the patient's condition.

This reduction, during this first period of twenty-four hours, has always been greatest in measles, next in erysipelas, scarlet fever, and, last, in smallpox—that of measles averaging  $10^{\circ}$ , of erysipelas  $8^{\circ}$ , scarlet fever  $6^{\circ}$ , and of smallpox  $5^{\circ}$ , a difference occurring in all of them according to their being, when this application is made, in their initiative, full, or fading stages. The change of temperature on the second period of twenty-four hours has never been found to be much, if any, save that in scarlet fever it was always as great as during the first period.

In the third period, erysipelas has always ranked first, then measles. Where the cases had been treated in this manner *ab initio*, they often showed no increase over healthy temperature, the difference being often evidently due to that of the mode of application used; erysipelas and smallpox showing more than measles and scarlet fever, because, with the former, whatever renewal of dressing had to be made, was without taking the original off, but by adding another layer of the paste on.

By the end of the fourth day there was never any abnormal temperature, if the case was doing well, save in smallpox and scarlet fever, where there was a slight exacerbation of two or three degrees Fahrenheit above the normal state, lasting until desquamation was complete.

The second effect—that on the pain—was always of a most marked character; the pain belonging to erysipelas, smallpox and scarlet fever being promptly dissipated; the patient often expressing the progress of the relief as the application was being made, and usually going to sleep quickly after the dressing was completed. With measles, there being nothing but itching and distress from catarrh, both nasal and pharyngeal, there was not much of this effect to be looked for.

I have not, however, hesitated, when acute pain showed itself in the chest, loins or abdomen of a case of true or suspected measles, to apply the clay paste dressing directly over those parts. I have also frequently dusted the surface of the face, chest and limbs with the powdered earth. This soothing effect of the earth dust shows itself in all these diseases, in all stages of them, and is intimately associated with the reduction of temperature.

The fourth effect, that of allaying the general or constitutional symptoms of each, might very naturally be looked for as the result of the first and second effects. Indeed, a very close study of those effects must readily lead one to the recognition of all (the latter four included), being directly due to the application of the earth *per se*.

In order to make this communication more definite, I will now give details of a case of erysipelas and those of one of smallpox.

On one evening in the month of February, 1873, the Quartermaster of the U. S. Army, stationed in Philadelphia, called at my office about half-past nine o'clock, and inquired if I could be ready at the station in half an hour, to take the train for the Far West, with the purpose of visiting a prominent member of the army, who was pronounced by his medical attendant there to be fatally ill with erysipelas of the face and head.

Only two days had at that time elapsed since the eruption first showed itself, and when I reached the patient, at the end of the third day, the disease involved all his face and scalp. He could not open his eyes, on account of the depth of the swelling there. He was wild with delirium,



with a temperature of  $111^{\circ}$  Fahrenheit, and was only kept in bed by strong muscular efforts of those around him. Anodynes and stimulants had been freely given.

These I directed should be discontinued, and proceeded at once to prepare the earth dressing, in the meanwhile observing the patient. I spread the prepared clay freely, when ready, and directly on the skin of the face and scalp to the depth of a quarter or three-eighths of an inch, and over the eyelids of a half inch. By the time I had this application completed the patient was quieted, and he passed into a sound sleep. This sleep, coming on before midnight, lasted without interruption until 4:30 A.M., when I was called, by my own direction, and awakened him that I might determine whether there was any necessity of my remaining longer than the earliest hour by which I could be sent East, and, if not, I would then have time to apply another dressing of the earth before leaving him.

He awakened very promptly, and asked what his face was covered with; and on my answering him he recognized my voice, and was soon fully informed of what he had gone through. The shrinkage of the face was very marked, and the removal of the dressing was easily and quickly accomplished as a consequence. The masses covering the eyelids still held them together by means of the lashes, and on my freeing them by scissors, the patient readily opened them and recognized all around him.

I reapplied the clay as I had applied it the night before, and, leaving him, was sent directly home, the train stopping but once on the route (half-way), for the purpose of my receiving a telegram informing me that the patient was doing well. On my reaching home, a message, which arrived just ahead of me, stated that he was continuing to improve. He convalesced rapidly, and was out at the end of seven days, he being directed by letter to continue the earth until the desquamation was completed.

Since then this gentleman has not only frequently succeeded in blighting threatened erysipelas, but likewise threatenings of gout and rheumatic arthritis.

Now allow me to recite a case of smallpox.

Ten years ago, I was summoned to see a prominent criminal lawyer in whose family I had used the earth with much satisfaction. He had been, when I reached him, complaining for two days, with fever and a numerous eruption of well-defined pink spots congregating together in many

places, especially on his face and forehead. He did not have any traces of vaccination of early life, and had never himself had that process of protection renewed. This eruption was evidently spreading, and, according to those around him, was more distinctly vasicular than the day previous, and had something of an areola at each point. I told him it looked like smallpox, and a plan of treatment must be instituted as soon as possible to prevent pitting of his face, hands and neck. He asked me very quietly, "Do you want to put some *mud* on my face?"

"Yes," said I. "Its use has always given the best results I have ever seen."

"What do other doctors do?" said he.

"They use salves, plasters, and various kinds and colors of covering, actually for the purpose of excluding light and air from the surface where the eruption is developing most rapidly."

"What one of those do *you* think the best?"

"The French Emplastrum de Vigo spread on thin kid."

"Well," he said, "I will talk to you again on the subject."

"Now," said I, "don't try to come the lawyer over me. The question must be decided before another twenty-four hours sets in, for otherwise you will have left your decision too late for the fair use of anything."

My patient had as a neighbor a physician, with whom he bore very social relations, and I had suspicions that the delay was for the purpose of getting his opinion on the subject.

Before I had time to speak to him on my next day's visit, he said that he had a plan to propose to me, which was to use the earth on one side of his face and the French plaster on the other. To this I promptly agreed, and sending for some of the plaster, I proceeded to mix the clay. From the manner in which he then talked I was satisfied that his neighbor had been conversing with him on the subject, and I was pleased with such a good opportunity for proving my conviction arrived at in previous cases. The patient's bedroom fronted on a street running north and south, and its windows (two in number) opened to the east. His bed, close to these windows, stood with its head to the south, so that the right side of his head, face and neck was more exposed than the left. I called his attention to this fact, and said that I would apply the earth on the right and the plaster on the left; and to show, as well as possible, a dif-

ference between the two, if one should exist from that cause, I would leave both ears uncovered, that he should be able, by watching the disease, then to see this difference and appreciate the effects of the greater exposure of the right side.

When the plaster came I was quite ready to apply it, and, that I might do it with accuracy, I drew a line through the surface of the center of his forehead, of his nose, of his lips, of his chin and of his neck to the top of his sternum. I then applied the straightest margin of the plaster along this line, with the body of it over to the left, and by nicking and trimming I made it cover completely and lie smoothly all over that (the left) side of those parts.

Then I proceeded to spread the clay over the other side, taking good care to leave the ear there entirely uncovered, as I had done with the left side. When I had completed this dressing, which averaged a fourth of an inch in depth, except on the eyes, where I made the depth considerably over half an inch, the patient assured me that the earth dressing was a good deal more comfortable than the plaster.

On my visit the next morning, his proposal was to use only the earth dressing, it was so much more comfortable.

"Ah!" said I, "that won't answer." The proposition to use the two was his own, and it was but fair to continue it. Two other effects could then be recognized—that of shrinkage of the right side, and the other, a reduction of (5°) temperature of that side.

In other cases of smallpox when the earth dressing was alone used, this shrinkage of surface and reduction of temperature were both more marked at this stage of the disease. Shrinkage was not to be detected at all on the left side until the ninth day, whereas it seemed almost completed on the right side by the fifth day.

This I rather anticipated, and resorted to the expedient of applying some of a thinner paste over the original one each day, and, after I had then crushed it so as to make it lie closely in contact with the skin, I made it hold by the film of cotton, as in the original dressing.

By the fourteenth day the shrinkage was so great, and the dressing so detached on the right, that I concluded to remove the dressing there, and did so without annoyance to the patient. There was no pitting or even unnatural tint to the skin. Desquamation followed this removal of the

earth, taking some three days for its completion. The patient now became anxious about the results on the other side. There was a strong odor there, and the plaster, though holding well, had become somewhat rolled up along its edges, showing crusts and a red tint of surface in between them. These crusts were not long in coming away, and the plaster became so loose as to allow of its being removed, carrying all the other crusts with it during the fourth week.

Then we could distinguish easily the difference of results between the two plans; and I noted carefully that where the earth had been used there was neither swelling, unnatural coloring, nor marks of where the eruption was when we first applied the earth. Whereas, on the side to which the Emplastrum de Vigo had been, the pitting was abundant; not, however, very deep, but most distinct and singularly close together along the line by which I meant to show where the two came in contact, or more correctly, the borders of the surfaces as qualified by each.

The contrast of the colors of the two surfaces was, perhaps, the most remarkable feature of all. Where I had used the clay and picked it off at the end of the second week, I did not allow the patient to wash the surface; but, on the contrary, I had him to dust it with some powdered clay every day until we removed the plaster. The surface which had been covered with it then looked like one of a burn where there had been deep sloughing and festering.

Finally, I met this patient on the street some weeks after I had ceased visiting him. My attention was arrested by the difference of the color which then still existed. He, readily recognizing my expression, said, shaking his fist in my face, "You scoundrel, If I ever get you in the room of the Court of Quarter Sessions, I will give you fits!"

---

AMERICAN AND BRITISH LAUDANUM.—The *Pharmacist* remarks that the tincture of opium of the new British Pharmacopœia is directed to obtain about 0.75 per cent. of morphine, while the United States preparation contains about 1.4 per cent., if opium of mean standard strength is employed; and that, therefore, the difference in strength between the two laudanums is almost 100 per cent.—*N. Y. Medical Journal*.



## Translations from Our Foreign Exchanges.

Translated for MEDICAL NEWS, from the French, by Dr. Illowy,  
Cincinnati, Ohio.

### ON THE TRANSPLANTATION OF THE SKIN OF THE FROG ON GRANULATING WOUNDS OF MAN. BY DR. O. PETERSEN.

SINCE twelve years, I have devoted special attention to skin grafting, under the directions of Prof. Bergmann. What I had especially in view was the transplantation on wounds of vital elements belonging to other species; I essayed to graft on wounds made on a dog, epithelial layers taken from man. Like Dr. Kniè, I succeeded perfectly in this, but never could obtain the inverse result.

Since that epoch, I have many times grafted on granulating wounds fragments of human epithelium; but in many cases which seemed to me favorable, I had to abstain therefrom for lack of transplanting material. In fact, many persons whom we care for in our hospital have not enough intelligence to understand the benefit of grafting; they find it illogical to create new wounds for the purpose of healing an old one. I was therefore again tempted to borrow fragments of skin from other species, but always without result. It seems to me that it is to the presence of the hair follicles and cutaneous glands contained in the grafts that the failures are due, owing to their rapid degeneration.

In the spring of this year, I read in the *Deutsche Medizinische Zeitung* an account of the experiments of Allen (which first appeared in *The Lancet* (London), May 15, 1884). It is well known that this author used as grafting material pieces of skin of the frog, which he transplanted on to ulcers of the leg. At first it seemed as if the fragments disappeared, but very soon they revealed their presence by clear spots which developed moderately, so that it became necessary to renew the transplantation several times. Not alone did the graft succeed, but it required only a short time to become effective.

At the time when the work of Allen came to my knowledge, I had in my surgical service in the Alexander Hospital a patient who had a vast wound in the nucha, who absolutely refused to allow any grafts to be taken from his cutaneous envelope. I resolved to profit by this occasion to verify the assertions of the English physician. The result obtained,

although unique, is so favorable that I feel compelled to bring it to the knowledge of the medical world; for my colleagues can at all times, at least those who inhabit terra firma, even in winter, procure a frog. This is the case of my patient.

Ivan J. W., thirty-five years old, shoemaker, entered the Alexander Hospital March 28, 1885, for a vast anthracoid phlegmon of the nucha. He is of medium stature, embonpoint moderate. The anthrax has invaded the whole nucha; the skin red; tense over the surface of the anthrax numerous, suppurating openings. The skin beginning to mortify. Pronounced induration all around the point of inflammation. The temperature has arisen to  $102^{\circ}$  F.

The days following his admission he refused any and every operative tentative; the treatment was, therefore, very impotent. It was not till the 30th of March, when the skin had mortified over a large surface and the temperature risen to  $103^{\circ}$ , that I could intervene surgically—large incisions over the anthrax and a cleansing of the wound with the cutting curette.

The next day the temperature had fallen to  $100.4^{\circ}$  in the morning and to  $97^{\circ}$  in the evening. The wound began to granulate rapidly, nevertheless, there remained about the middle of April a wound as large as a saucer. The reparation along the edges progressed very slowly. The patient, who refused to allow any grafts to be taken from his own body, consented to the transplantation of pieces of frog-skin. The 14th of June, the day of the first transplantation, the wound, although clean and granulating nicely, still measured nine centimeters in length and seven centimeters in width.

*First Transplantation.*—I removed the skin from the back of an adult frog (*rana temporaria*); I washed it in a two per cent. carbolized solution; I took therefrom a piece as large as the thumb-nail. The internal surface is gray, and presents here and there reddish spots, which are nothing else than the orifices of the cut blood-vessels. The detached morsel is carefully extended upon its external surface upon a piece of blotting paper; I then divide the skin and the paper, applied as they are one to the other, in two parts, and I then apply them to the wound in such a manner that the paper prevents the direct contact of the frog-skin with the fixative plaster. We must be very careful as to the good quality of the fixative plaster. The one time when I did not succeed was due to the bad quality of the plaster, whose contact with the

wound caused a suppuration and a failure of the transplantation.

The 16th, that is to say, two days after the operation, I removed the plaster. I found the two pieces of frog-skin augmented in volume; their dark pigmentation stood out markedly from the red floor of the wound.

*Second Transplantation.*—The 17th. I graft on two other pieces of frog-skin of the same size as the former. The latter begin to have a clearer tint.

The 19th. The two new pieces are firmly adherent. The pigmentation of the first has disappeared, and they present a light gray appearance. Here and there they send out prolongations in the form of fingers.

The 20th. The pigmentation of the other pieces has almost entirely disappeared. The color is a light gray. They have already reached the edges of the wound. The granulating surface is very small.

*Third Transplantation.*—The 26th. Three pieces.

July 5. The wound does not measure more than four centimeters in length and two and one-half in width; the cicatrix is soft, smooth and elastic.

*Fourth transplantation.*

July 7. The last transplanted pieces have not succeeded, for the bad quality of the plaster set up a suppuration which destroyed these grafts.

*Fifth Transplantation.*—The 15th. Three pieces.

The 20th. The wound is two centimeters in length and one and one-half in width. The transplanted pieces can not be distinguished any more from the cicatrix.

*Sixth transplantation* (one piece).

On removing the plaster, a dry, reddish surface is found of the size of a square centimeter. No pus on the cotton. It seems that the wound is covered with a thin and shining layer, presenting here and there some elevations.

The 26th. The reddish surface presents a cloudy tint; the wound can be regarded as healed; the cicatrix is astonishingly elastic and soft. The patient was discharged at his request.

*Remarks.*—The observation just reported presents very clearly the possibility and utility of the transplantation of pieces of frog-skin on to the granulating wounds of man. The wounds heal quicker and an excellent elastic cicatrix is formed. We therefore recommend most highly to our colleagues this method of skin-grafting. We used in our case

three frogs, which furnished us for six transplantations eleven pieces. One can be more economical than we have been, for there remained on our frogs large spaces covered with skin which we did not utilize. Recourse can also be had to the skin of the salamander or to that of the American dog known under the name of the bald dog; but we have no personal knowledge on this point.—(*Saint Petersburg Medizinish Wochensch.*) *Tribune Medicale.*

---

## Selections.

---

### Removal of a Large Piece of the Skull and Considerable Loss of Brain Substance—Recovery.

---

BY JOSEPH KURTZ, M. D.,

Professor of Clinical Surgery in the College of Medicine of the University of Southern California; Surgeon to St. Vincent's Hospital.

C. C., aged about 40, a teamster, received a cut or a blow with an ax on his head and remained unconscious on the open field, near Mojave, exposed to the burning sun-rays of the desert for some hours, his antagonist supposing he had killed him. At last he was picked up and poorly cared for for about three days, after which he was sent to the St. Vincent Hospital at Los Angeles. An examination revealed the following condition: A large wound on the right side of the head, covered with a mat of hair and blood-clots, with a slight oozing of blood from it; pulse irregular, about 120; temperature 102; marked convergent strabismus and slight convulsive action in left arm and leg. After removal of the matted hair and careful cleansing with a solution of bichloride of mercury  $\frac{1}{1000}$  under the spray of the same solution, the wound proved to be entirely open or rather everted, the cut part of the scalp, with a piece of the parietal bone adhering to it, lapping over and almost resting upon the ear. The dura mater was torn, and from underneath it oozed brain substance and serum at every pulsation; hair and other foreign matter were even forced into the wound of the dura, which were carefully picked out and every part of the wound thoroughly cleansed. As the bone was detached and perfectly dry, I removed it completely; it measured two and one-fourth inches in length



and one and one-half inches at its widest and three-fourths of an inch at its narrowest part in breadth, almost elliptical in shape. The flap of the scalp was returned to its proper place and the wound closed with carbolized catgut sutures, a small-sized drainage tube left at the lowest part. It was then dressed with Lister's dressing, previously moistened with the sol. of the bichloride, which had been used for the irrigation. The patient was by this time very much exhausted, and my prognosis was not very encouraging.

I ordered: *Rx.* Chloral hydrat dr. ii; bromide potass. dr. iii; morph. sulph. gr. ii; aqua oz. iii; syr. aur. cort. oz. i. *M. S.:* A tablespoonful every three hours; also gave a small quantity of brandy—enough to improve the circulation.

June 22. About fourteen hours after the first dressing I saw him again. He had passed a tolerable good night under the influence of the medicine; took nourishment, talked irrational, had slight convulsions. Pulse irregular, about 124; temperature 103. Dressing was not changed. Drew the urine with the catheter. As the bowels had not moved gave 10 grs. of calomel and ordered:

*Rx.* Elix. bromide potass. oz. iv; tinct. digitalis dr. i. *M. S.:* A tablespoonful every three hours, in the daytime, the chloral mixture to be given in the night.

June 23. No particular change in his general condition; the dressing was removed under the antiseptic spray; the wound in a good condition and redressed. The bowels had acted, but the bladder had to be relieved with the catheter again. Treatment continued.

June 24. Passed a very restless night; had several tonic spasms, followed by clonic ones. Gave hypodermic injection of one-third gr. morphia morning and night, and continued the bromide.

June 25. Very restless again in the night. During the temporary absence of the nurse fell from his bed and caused bleeding of the wound. After replacing him in bed he was taken with a strong tonic spasm, and after this followed complete hemiplegia of the right side, with total unconsciousness. This condition lasted till about July 3d, when I found him, to my great surprise, perfectly rational and in every way improved except the hemiplegia. During these eight days the treatment was but little changed; the wound was dressed daily, and was closed on the twelfth day all but where the drainage tube was inserted, in which a fistulous opening remained for nearly two months. Occasionally he received a

cathartic of calomel or an enema, and during the whole time the bromide mixture in the day and the chloral and morphia in the night. On the 20th I put him on the alterative treatment of small doses of calomel, which was kept up till the 27th, when I changed it for the iodide potassium. He now progressed very rapidly. About a month after admission he began to use his limbs, and soon walked with one crutch and the assistance of the nurse (as he was unable to hold a second crutch in the paralyzed hand). From there on I began to pay attention to the peripheral trouble, applied the faradic current mildly and gave internally strychnine and iron. This treatment was continued until he left the hospital on the 21st of August, just two months from the day of his admission. By this time he had perfectly recovered the use of his leg, could move his arm in almost every direction, but was still unable to hold anything in his grasp. The opening into the head, when the bone was removed, seemed obliterated by bony deposits, and the wound was nicely cicatrized. Sensation was good.

A few days ago I heard from him. He is working as a teamster, though his arm is still weak.

This case is interesting in various ways. In the first place it proves that even very severe brain lesions are as amenable to treatment as any other lesions, and much more so than those of the abdominal or thoracic organs. I have reason to believe that thorough antiseptic treatment with free drainage assisted materially in bringing about such a favorable result; and believe also that if we would or could carry out this sort of treatment in the surgery of lungs or abdominal organs, we would be no less successful.

The case has also been interesting to me in the observation of the subsidence of the paralytic symptoms. After the very violent symptoms, as convulsions and delirium, had passed, the sensation was first restored, then the paralysis of the bladder overcome, next that of the leg, then the muscles of the face responded, and finally the arm became useful. I have never seen any particular statement of such facts, but have at several times observed that paralysis of the upper extremities usually lasts longer than that of the lower ones after injuries of the head. Whether there is a greater tendency to the recovery of the nerves of the lower extremities than of those of the upper ones after such injuries, I am not prepared to say; I believe in paralysis follow-

ing apoplexy the manner of recovery is reversed.—*Southern California Practitioner.*

---

## Chicago Gynæcological Society.

---

*Stated Meeting, Friday, January 15, 1886.*

---

DR. CHARLES WARRINGTON EARLE read a paper entitled  
THE WATERY DISCHARGES OF PREGNANT WOMEN.

CASE 1.—Mrs. F. K. consulted me for a profuse watery discharge which had taken place several times during her pregnancy, commencing at the third month. She was the mother of three children, and had always been free from any marked pelvic disease. The first discharge was clear and watery, and she estimates the quantity at about two quarts. This came away in a gush, most of it being discharged at once, although there was a slight loss for some days thereafter. At first it was thin and clear, then slightly thicker, of the color of weak coffee. These discharges seemed to occur every two or three weeks, and were frequently attended with considerable pain. There was a decided diminution in the size of her abdomen after each discharge.

On October 30th I found her in great pain, and examination demonstrated that the foetus was very low in the pelvis and apparently not surrounded with any liquor amnii. The os uteri was neither soft nor dilated. She was ordered anodynes and to remain in bed. On the 7th of November I again saw her, and found she had been having more or less pains since my previous visit. There was no dilatation. Two days after, however, she was delivered, her gestation having lasted about two hundred days. The child lived about one hour. She made a good recovery and resumed her place in her family in the course of two weeks.

CASE 2.—Mrs. M., 27 years old; in her ninth pregnancy. At the end of five months she commenced to have a flow of fluid which continued until the end of the seventh month, when she gave birth to twins, one living and the other dead. There was no escape of liquor amnii at her confinement. The same lady in her eleventh pregnancy commenced to lose fluid at the end of the seventh month, which continued until the completion of the full term, when she gave birth

to a healthy child. She had what her attendants called a dry labor.

CASE 3 — Mrs. D. W. R., aged 31, the mother of nine children, has been pregnant since July 1st, 1885. On November 20th she said to a friend who was at her bedside that she was flowing, and asked to be supplied with a napkin. A sheet folded and placed under the patient was thoroughly saturated with fluid; the discharge being equal, probably, to about two pints. She had severe pains, simulating those of labor, lasting a few hours. On December 15th she had a similar discharge. The future of this case is yet to be decided.

*Frequency.*—These cases evidently take place with more frequency than we have, up to this time, supposed; but the older obstetric authors have noticed peculiarities of this kind, and given very fair descriptions of the complication.

Smellie says (page 177, Vol. II.): "Dribbling of fluid may go on for weeks, but a sudden gush is invariably followed by parturition; the longest interval between a sudden gush and labor being seven days." In this he is certainly mistaken, as the history of many recorded cases and some of mine will demonstrate.

Denman, 1815, says: "Instances have been recorded in which the waters of the ovum are said to have been voided as early as the sixth month of pregnancy without prejudice either to the child or to the mother. The truth of these reports seems to be doubtful, because, where the membranes are intentionally broken, the action of the uterus never fails to come on. A few cases of this kind, somewhat similar, have occurred to me. A discharge of colorless fluid takes place, daily, from the vagina for several months preceding labor, which is due to the rupture of some lymphatic. Such labors are usually premature and the foetus small." The same authority also cites a case where, after the delivery of the placenta, several pints of lymph were discharged.

Burns, 1822, page 238, says that the discharges of watery fluid from the vagina are not infrequent, and generally depend upon the secretion of glands about the cervix; the rupture of lymphatics, or from fluid collected between the chorion and amnion, or water from blighted ovum in the case of twins.

Dr. Pentland relates a case in which coughing produced a discharge, the water being discharged at the fourth month; but labor only occurred at full term.



Merriman, in his work entitled "Difficult Parturition," 1826, relates the case of a lady—six months pregnant—from whom a profuse watery discharge occurred. She summoned a physician, who assured her that if pains came on she would soon be delivered. She continued, however, to the end of pregnancy, having a profuse discharge each day. At full term she was delivered, her attending physician rupturing a bag of waters, which appeared in no way different from usual cases. No opening was discovered in either the placenta or the membranes, and he concluded that the discharge must have come from the outside of the membranes.

Chailly, edited by Bedford, 1844, gives a rather full account of hydrorrhœa, the description not being different from those I have already related. He says, however, that these discharges are more frequent than are generally supposed, but makes the erroneous statement that in nearly all these cases pregnancy is carried along to its full term.

Nearly all modern authors devote a short section to the consideration of this subject, giving different names, as their ideas of its origin and pathology are different.

Three separate and pathological conditions seem to be, in many cases, confounded, and I see no way by which a differentiation can be made.

- 1st. A discharge of the liquor amnii.
- 2d. Discharges from increased glandular action.
- 3d. A possible collection of fluid between or outside of the membranes, and its irregular evacuation.

In my teachings I have been in the habit of speaking of hydrorrhœa, but never, up to a few months ago, had I seen a marked case. A study of this case with others collected from my own experience, and the perusal of the article written by Dr. Thomas C. Smith, of Washington, D. C., which appeared in the *American Journal of Obstetrics*, in May, has caused me to go over the subject carefully and to present what I can obtain from the authorities in regard to these peculiar discharges. Great number of cases have been recorded, but no one, up to this time, has demonstrated conclusively the source of the flow.

The etiology of these discharges has been the subject of very different opinions by different obstetric authors. Chailly says that authors have attempted to show that these discharges are due to the accumulation of fluid between chorion and amnion; to rupture of lymphatic vessels; to transudation through amniotic membranes; to rupture of the mem-

branes at some remote point from the orifice of the uterus, and finally, to dropsy of the womb.

Lusk says the pathological processes involved in the disease are vascularity, hyperæmia and hypertrophy of the interstitial connective tissue, and of the glandular elements of the decidua.

Barnes in the "System of Obstetric Medicine and Surgery," 1885, says in regard to these discharges, without entering into a critical discussion of the several theories, that it seems to be well established that there are five sources from which this fluid may come :

- 1st. A discharge from the cervical canal.
- 2d. The decidual origin.
- 3d. Transudation through amniotic membranes.
- 4th. Hydatidiform degeneration of the ovum.
- 5th. Cauliflower excrescences.

The differential diagnosis must rest between the following similar discharges :

From the discharge from hypertrophied cervical glands.

Fluid collecting between chorion and amnion, occurring only once.

Escape of fluid from amniotic cavity.

I. The fluid escaping from the hypertrophied glands must be small in quantity, and we would expect that it would continue for a considerable length of time. There would be no diminution in the amount of liquor amnii, and the child would be found floating in the usual amount of fluid.

II. If the fluid collected between any of the membranes, and adhesive inflammation surrounding it followed, a considerable amount of fluid might collect, and the discharges would be considerable at once, and might or might not be repeated. In such a case there would be no evidence of escape of true amniotic fluid, although there might be a lessened size of the abdomen.

III. Where the liquor amnii escapes there would be a greater tendency to uterine contractions ; a more perceptible diminution in the size of the uterine tumor, and a microscopical or chemical examination would certainly reveal some evidence of urine, as we know this exists in variable quantities in the liquor amnii.

Transudation through the amniotic membrane, although recently noticed by Barnes, and mentioned by older authors, would give rise to the discharge of a very small amount of fluid.

This could hardly be differentiated from a slight discharge taking place from the cervical glands. Fluids discharged from hydatidiform degeneration of the chorion or from cauliflower excrescence, would be so associated with the diseases which cause them that the diagnosis would not be difficult.

*Prognosis.*—As far as my observation goes, the life of the woman is not jeopardized, but she suffers from the constant discharge and becomes anæmic. The pain is sometimes severe, as I have before remarked, and the patient is full of gloomy forebodings, and anxious in regard to the final result.

The fœtus is usually born prematurely, and, in many cases, only lives a short time.

The treatment must necessarily be very simple—rest and anodynes being about all that can be suggested.

---

### Malarial Fever.

---

DR. CUMMINGS, in *New England Medical Monthly*:

I send the following treatment for malarial disorders, after having used it in over three hundred cases.

From forty to fifty grains of potass. brom. are put in about half a glass of water, and at the first symptoms of gaping, stretching, occipital or frontal headache, or other sign of an approaching chill, it is taken in three doses, ten to fifteen minutes apart. Immediately after, a capsule containing five grains of dextro-quinine and one grain of capsicum are taken, followed in four or six hours by another, and so on until six or eight are taken. This seems to be a permanent stop to the chills.

The above was the original method, which gave satisfactory results, but after numerous trials I settled upon the following mixture for the capsules, finding that my results were, and are almost always good. R̄. Quin. sulph., gr. xij. xvij; p. capsicum; p. zingiberis, añ gr. iv.; p. ex. nuc. vom. gr. ij.; p. ex. xanthoxylum (Keith's), gr. ix. M. et. ft. capsulæ No. ix.—One every five hours.

A typical case of the tertian variety is treated as follows: Paying no attention to the bowels, the bromide solution is kept on hand and at the appointed time is taken, followed by a capsule containing the last formula, varied slightly to suit different phases of stomach, head or neurotic symptoms.

The result is usually an absence of the prodromal symptoms up to the time of the fever, which usually makes its appearance in a much less degree. On the next regular day there is an entire absence of all symptoms, which continues indefinitely, some cases giving weight and appetite at once. I have found that cathartics given before treatment are detrimental to a thorough action of the formula.

In the irregular forms, or the quartan variety, I order three or four capsules a day until twelve or fifteen are taken, each containing not more than one grain and a half of quinine. This treatment is not applicable for children of tender age, and I use for them, especially those under one year, the following, with excellent results: *Rx.* fl. ex. jaborandi, ℥j.; fl. ex. cimicifuga, fl. ex. eucalyptus glob. aa ℥ij. *M.* Dose gtt xx to ℥j in aqua ℥ viij—a teaspoonful once in two hours according to indications.

It would lengthen this article too much to give my opinion as to the action of these formulæ, but I think that every one will see the *modus operandi*, and I think I can say, not boastingly, that during four years' practice in a malarious section, I have had reason to use arsenic, iodine, calomel, or any other method, but few times—not more than a half dozen. Cases of from two to fifteen years' standing, who have relied altogether on large doses of quinine, have according to their own statement received permanent relief.

---

### Treatment of Malaria.

---

DR. J. F. DAVIS writes substantially as follows to the *Courier of Medicine*:

The following plan of treatment I have carried out with good success for twenty years in several hundreds of cases of malarial fevers.

First, if the tongue be coated, give one or two of the following pills: *Rx.* Pill. hydrarg., gr. ij; podophyllin., gr.  $\frac{1}{4}$ ; pulv. ipecac., gr.  $\frac{1}{4}$ . *M.* ft. pill. no. j. And commence immediately with one of the salts of cinchona. *Rx.* Quininæ sulph. gr. xxx.; pulv. capsici, gr. xij.; leptandrin, gr. iv. *M.* Chart. No. xij. *Sig.* One every two hours.

I have used quite extensively the sulphate of cinchona, and have found it effective; but the dose must be larger than either cinchonidia sulph. or quinina sulph. I have found leptandrin to be excellent, especially when the tongue



is dry and parched. It does not purge, but acts as an hepatic stimulant. I give bismuth and Davis' powder; the latter is made as follows:  $\mathcal{R}$ . Pulv. opii.; pulv. ipecac.,  $\text{ãã}$   $\text{ʒ}$  j.; pulv. camphoræ,  $\text{ʒ}$  ij.; potass. brom.,  $\text{ʒ}$  j.  $\mathcal{M}$ . Sig. Dose the same as the old pulv. Doveri.

If there is much nausea, which is quite common, give one grain of calomel with five grains of bismuth, and have the patient drink mint water with ice in it, and apply in some cases a sinapism to stomach. The diet is to be unirritating, but nutritious; patient's clothing to be kept clean by often changing; stimulants to be given freely if any symptoms of failing vitality appear. In a given case of malarial fever my method is to *saturate the system with the antiperiodics and keep it up until the fever subsides.*

### Tubercular Meningitis Cured by Iodoform.

A SWEDISH physician, Dr. Emil Nillson, alleges that he has cured an undoubted case of tubercular meningitis by frictions on the shaved scalp with iodoform ointment (1 to 10).<sup>1</sup> The patient was a boy, aged 8, whose mother had a family history of phthisis, and four of whose brothers and sisters had died from tubercular meningitis. The symptoms in this child's case were similar to theirs—headache, torpor, convulsions, strabismus and pyrexia. He was at first treated with calomel and iodide of potassium, but did not improve; and, after having been under treatment a week, became distinctly worse, being unable to take food or medicine. The pallor of the face, which had preëxisted, gave way to flushes of the cheeks. The child threw himself out of bed, and presented severe clonic spasms of the limbs and of the facial muscles. The head was then shaved, and iodoform ointment rubbed in, an oil-skin cap being put on. The friction was repeated three or four times in the day, and the next day there was a decrease in the convulsive movements, the sleep was calmer, and spasmodic contractions, which had previously been excited by the slightest noise, now ceased to be so. Consciousness shortly afterward returned, and the child's face became of a more natural color. This, however, was accompanied by a severe coryza, redness of the lips, and irritable cough, the breath smelling strongly of iodoform. The ointment was discontinued, and syrup of iodide of iron given. The unpleasant symptoms rapidly dis-

appeared, and the child was soon running about in good health.—*British Medical Journal*.

---

## Syphilis is a Constitutional Disease from Its Inception.\*

---

BY A. H. OHMANN-DUMESNIL, A. M., M. D.,

Professor of Dermatology and of Syphilology in the St. Louis College of Physicians and Surgeons.

---

THAT syphilis is at one time purely a local manifestation and that it becomes generalized or systemic we have no reason to doubt. But the important questions arise, at what time does it become systemic? and what is a clinical guide upon which we may rely for the determination of this point? The bacillar theory of syphilis has been quite a favorite because it seemed to offer such a ready solution to the question. For, if we admit that the bacilli form a nidus at the point of entrance of the syphilitic virus, there attain their maturity, and are thence transferred by means of the lymphatics further on until the whole economy is infected, we have clearly a local condition becoming generalized only after the lapse of a greater or less period of time, an interval which careful observation might determine with a certain degree of accuracy. Microbian pathology, besides, is very seductive in its aspects, and appears so reasonable and so demonstrable that we are led away from a just skepticism by the charms it presents. It was on this account that, when Lustgarten announced the discovery of the bacillus of syphilis and the methods of differential staining applicable to it, the medical world rejoiced and the press was not slow to disseminate the glad tidings. But other workers in the field, notable Alvarez and Tavel, in trying to obtain new data, completely overthrew these great results, and claimed to have demonstrated that bacilli are found in the normal secretions about the anus and genitalia which are identical with Lustgarten's bacillus of syphilis. They also resemble the bacillus of tuberculosis, being, however, a little more slender and granular.

But leaving aside the bacillar question, it may be argued that syphilis originates as a local lesion purely, and that early excision of the local primary lesion ought to procure immunity from any further manifestations. This immediately

---

\*Read before the St. Louis Medical Society, Dec. 26, 1885.

opens up a number of questions. When is it early enough, or rather when is it not too late, to perform excision or otherwise destroy the nidus? By what means is the disease disseminated throughout the system? Is the chancre still a local manifestation at the time of induration of its base and of the neighboring lymphatic ganglia?

In answer to the first question I wish to call your attention to a very interesting and brief *résumé* on the subject by Dr. Edward L. Keyes. In one case (his own) excision was performed before the lesion was twenty-four hours old and before any induration had taken place, the result being negative. The author in commenting upon it says: "This case I consider worthy of record, because it fulfills the most exacting conditions for testing the question, still under consideration in the profession, as to whether syphilis is, or is not already a constitutional disease when the chancre appears." Berkeley Hill's case, where a man tore his frenum during intercourse and less than twelve hours later had it thoroughly cauterized with fuming nitric acid, and followed a month later by a general syphilis, is also quite convincing. Leloir mentions a case where a medical student had constantly watched his penis for a sign of a chancre. One night at twelve o'clock nothing was visible. The next morning, however, an erosion or rather macule was observed, largely excised at two o'clock in the afternoon, but without effect, as general syphilitic manifestations followed. From these few cases, which might be almost indefinitely multiplied, it is evident that early and thorough excision of the chancre is fruitless, and that if performed as early as the period antedating induration, or before sclerosis has been declared so as to be recognizable, the result is the same—unavailing. The question as to how early excision should be performed appears to be one incapable of a definite solution in a clinical point of view. For, evidently, if the local theory is correct, excision was too late in all these cases; and, if a few hours after appearance of the initial lesion is too late practically, we can scarcely hope to find relief in an operation of this kind, especially as we have no method of finding whether a patient has contracted syphilis before the appearance of the chancre or not, unless it be by confrontation.

Barthélemy says that he saw what he thought was an undoubted indurated chancre. The patient was subjected to no treatment, and eighteen months later no constitutional symptoms had appeared. He very pertinently remarks

that had excision been resorted to, the case would undoubtedly have been regarded as one of syphilis cured by excision, and as proving the local nature of the disease. As Zeissl has well observed, the excision of the induration does not prevent the appearance of secondary symptoms; as Delpach has noted, it frequently happens that the induration is reproduced at the site of the operation.

But, even knowing positively that the patient has contracted the disease, how are we to determine the point of entrance of the virus? A single, a number, or no abrasion may exist immediately after the intercourse, and syphilis may or may not be subsequently developed. In the case of a single abrasion it may be that some other solution of continuity, invisible to the naked eye, is the point of entrance.

In regard to another question, as to the channel by which the virus is disseminated; it is equally difficult to determine it. Of course, there is no doubt whatever that the lymphatic system is implicated, but is it alone concerned? The virus produces tissue changes in the walls of the blood vessels and cells in the immediate vicinity, whilst the lymphatics retard its onward passage. It has not been proven, by any means, that the virus is isolated in the lymphatics before being generally distributed. Were this the case, the method proposed by Dr. A. H. P. Leuf would be an excellent one. He thinks that excision of the indurated ganglia and possibly of the connecting lymphatic vessels would prove effective in eradicating syphilis. No practical demonstration has yet been made in this direction, so it remains a purely hypothetical method.

A great objection to the theory of the localization of the syphilitic virus is that cases exist of men affected with a mild "latent" syphilis who infect their wives, who, in their turn, never exhibit a chancre, but manifest the presence of the disease by such symptoms as falling of the hair, periostitis, exostoses, metrorrhagia, etc., in whom these all disappear under anti-syphilitic medication. Now, is it not reasonable to suppose that the virus will develop and produce the changes which are observed in the general system, and find its expression in an explosion upon the surface, as it is held chained for a time in a certain circumscribed space only to fulfill the former condition?

The different periods of incubation and their regularity, together with the fact that general measures given at certain periods merely retard certain explosive outbreaks, would



seem to indicate that the infection is general. A thorough consideration of the whole matter will also seem to indicate that the initial sclerosis is but an indication of a systemic infection. The fact that auto-inoculation has been successful after the appearance of the induration, as detailed by Dr. Pontoppidan, does not invalidate the position, for it is merely a local sclerosis of the skin. There is induration, but unaccompanied by induration of the lymphatic ganglia anatomically connected with the induced sclerosis. The experiments are somewhat vitiated also by the fact that pus was used in the inoculations.

As is well known, the lower animals are, as a rule, not susceptible to syphilis. On this account, experiments have not been possible. No one is willing to submit to inoculations for the sake of a theory, and an experimenter would not consider it justifiable to do so without the consent of the subject. For these reasons, all that has been done has been through clinical observation and analogy, each observer endeavoring to make certain facts explain a pet theory.

When Bell differentiated gonorrhœa from syphilis, a howl arose from a numerous horde of opponents who detailed numberless supposed facts to prove that he was wrong. Hunter discovered a positive diagnostic sign of the chancre, and still something was wanting. Ricord gave us the intra-urethral chancre, with which he explained everything. Since that time we have had the "mixed" chancre brought to our notice to explain a number of apparently anomalous cases. But, one fact has towered above all these; one which has remained constant despite the various perturbations of theories, and it is that syphilis is a constitutional disease. In spite of the numerous mistakes which have been made and the errors of theories, it remains such to this day, so accepted by the vast majority of the profession. Nearly all the observations that have been made point to this one fact—that syphilis is constitutional as soon as the chancre has made its appearance. We will not take into account the theories of the unicists, whose death-knell was tolled when Wigglesworth announced the result of his well-known experiments. To arrive at a clearer general understanding it will be better to define some terms. We do not *know* of the presence of syphilis in an organism until the chancre has made its appearance. But as this sclerosis is the result of a virus, which has had an opportunity of developing during a certain amount of time—the period of incubation—it repre-

sents, as it were, what the disease is. To show that the virus has been at work before its appearance, it is only necessary to have in mind the fact that, frequently, during the primary period of incubation patients will be affected with cephalalgia, rheumatism, become anæmic, depressed in spirits, melancholic, etc. So that we may regard syphilis as constitutional *ab initio*, recognizing as the beginning of the trouble that time at which it can be recognized, viz.: upon the appearance of the chancre.

This is a theory which will be found to agree more closely with clinical facts than others, no matter what we may suppose the prime cause to be, and is itself based upon clinical observation. It will satisfactorily explain many otherwise puzzling cases, and not only this, but it will preserve many a patient from useless mutilation and save many a physician from committing a costly blunder—*St. Louis Med. and Surg. Journal*.

---

### Electricity in Obstetrics.

---

DR. W. T. BAIRD, in an elaborate article in *The American Journal of Obstetrics* for July, discussing this subject, says of the methods of application:

It will be observed from the preceding pages that those who have employed electricity as an oxytocic have applied it by various methods, and with few exceptions each observer has claimed beneficial results. Now, without reflection, this might seem confusing and contradictory, and it might be claimed that a remedy which admits of such a variety of methods of application might in some way mislead the judgment of the operator, and therefore his conclusions would be of no practical value. But when we come to consider the various structures to which the current may be applied, and *produce contraction of muscular fibre*, it will at once appear that each method employed would be effective, as there has been no method spoken of which would not include some one or more of these structures within the circuit. It will be remembered that in order to stimulate muscular fibre to contraction by means of electricity, it becomes necessary that the current should affect either the muscle itself, the nerve which supplies it, or the plexus from which the nerve emanates; and, therefore, it may be inferred that any method which may be adopted,

which will include either the uterus or the uterus and the spinal cord in the circuit, will contain some elements of merit. I do not by any means regard all of these methods as possessing equal value, and a comparison of the merits and demerits, as I understand them, of some of the methods most generally used, may not be out of place here.

Dr. Radford proposed the application of one pole of the faradic current to the abdominal parietes over the fundus uteri, and the other to be directed to the os and cervix. Mr. Cleveland advised both poles to be applied externally to the abdominal parietes; while Dr. F. W. McKenzie claims that the positive pole should be applied to the nape of the neck, and the negative to the os, "for acting energetically on the contractile fibre-cells of the uterus." Tripier faradizes the lumbar region. Dr. A. Murray applies one pole to the sacrum and the other to the abdominal parietes. Now there is no one of the above described methods which would not include the uterus, its nerves or nerve plexus within the circuit, therefore either method would promote uterine contractions. Dr. Radford's method (and it has been adopted and recommended by most writers on the subject) includes the muscular fibers of the uterus in the direction of their long axis, and therefore it must of necessity be very effective, but it is open to one very serious objection, that of bringing one or the other pole in too close proximity to the head of the fœtus; and this objection would hold good either in case of a vertex or a breech presentation. In a former part of this paper I referred to the warning given by some writers on this subject, where they say that "there is great danger of producing the death of the child," etc. I promised to show that by proper applications this danger could be easily avoided, and it is this very application of Dr. Radford's against which I would wish to enter a protest, as being in a high degree dangerous to the child. In a case of vertex presentation, the pole applied to the os and cervix would bring a current of great density almost in direct contact with the head of the fœtus; and in case of breech presentation, the pole which is applied to the fundus uteri would also be in close proximity to its head; and this, too, in either case, while the head of the fœtus is bathed in fluids containing salts which render the current highly penetrating. When it is taken for granted that any physician who possesses a sufficient amount of intelligence to handle a faradic appara-

tus knows full well what highly painful and injurious effects will follow the application of even a mild faradic current to the head, I think I will be justified in recording the following rule which I adopted when I first commenced using electricity as an oxytocic, and that is: *Never to make the application in such a manner as to include the head of the fœtus in the circuit* in any case where its welfare is to be considered. By strictly adhering to this rule, I have never seen any ill effects produced on the child, nor had the least apprehension of it. \* \* \* Any good, reliable induction apparatus will answer, but it *must* be reliable and in perfect order, otherwise it will most likely fail at the very moment its services are most required. I use one which was manufactured by Dr. Jerome Kidder for Dr. Heed and myself sixteen years ago, and it is still reliable, although having been in constant use during all that time. This is what he calls "The Physician's Visiting Machine;" but when it is not convenient to carry one so bulky, I use a "Pocket Induction Apparatus," also manufactured by J. Kidder. This is very convenient, and gives all the current which could be required in any case. The only objection to it is that, if its use is required for longer than one hour, it will be necessary to recharge it.

---

### Philadelphia Slaughter-Houses.

---

DR. GUY HINSDALE presented a communication on "The Methods of Slaughtering Animals at the Philadelphia Abattoir."

There has recently been put in my hands a series of written questions which relate to the methods of slaughtering in our Philadelphia Abattoir. The subject has been brought before the Society for the Prevention of Cruelty to Animals, and the officers of the Society desire to obtain from some of our Philadelphia physicians an expression of opinion as to the proper method of killing cattle with the minimum of pain.

As the members of the Society are doubtless aware, enormous numbers of cattle, sheep and pigs are slaughtered at the abattoir in West Philadelphia. Into the main hall of the building, which is spacious, having a high roof, with good light and ventilation, the cattle are led in large numbers. They are apportioned to about fifteen different pens



or iron cages arranged in a straight line, each capable of receiving seven or eight bullocks. The iron bars of which the cages are made are separated about fifteen inches from each other, affording a comparatively unobstructed view of the remainder of the room. The gate of exit from a pen is opposite the gate of entrance; above it is the windlass for hoisting. The animal is, in most instances, struck down while standing among his fellows, by a butcher who stands on a plank above him armed with a heavy, long-handled sledge-hammer. He is then hoisted by the windlass through the open door, is disemboweled and dressed for the market within six feet of the animals remaining in the cage. When the carcass is ready for the market one of the butchers climbs above the cage, and with the hammer strikes down two more animals; they are dragged out, and so on until all the animals are disposed of.

The Jewish butchers for ages have killed by bleeding. They never use a hammer, but after hoisting the animal by a hind leg, the throat is always cut by a rabbi or "shockem," armed with a keen saber. This rabbi is detailed for duty at the abattoir.

Underneath the main hall is a cellar in which sheep and pigs are slaughtered by the knife. It is a dark, unclean, repulsive place. Large quantities of accumulated gore are seen in the places where the animals are usually killed. The surface drainage is very bad; the upper floor, though deluged with blood, is attractive in comparison.

The questions to which answers are desired by the Society for the Prevention of Cruelty to Animals are these:

1. Does the Israelitish method produce a total loss of sensation?
2. Does a total loss of sensation arise from a blow struck upon the head of the animal with sufficient force to knock him down?
3. What is the most humane way of slaughtering cattle, which would produce instantaneous death?
4. Do you think a bullock is so sensitive as to suffer terror or agony in witnessing the deathblows and sufferings of his companions?

With a view to satisfy myself on these points I made three visits to the abattoir. I had no especial interest in the subject before, and supposed that the methods were not open to criticism.

As for the first question, I think it safe to say that the

Israelitish method is instantaneous when once the steel strikes the neck. The blood gushes out, the brain is instantly deprived of blood, and consciousness is lost without appreciable loss of time. The young rabbi deserves credit for the skill with which he performs this operation. To suspend animals with heels up and head down is, at first sight, somewhat harsh, but, on the other hand, they are accustomed to a low position of the head, and the new position is only ninety degrees removed from the normal.

Regarding the second question, it appeared to me that consciousness did not always cease when a blow was struck upon the head of an animal with sufficient force to knock him down.

The first two animals that I saw were struck on the head, in the middle line a little anterior to the line of the insertion of the horns. They instantly dropped; a few convulsive movements, sometimes unilateral, sometimes general, occurred, and they were removed from the cage. The next three animals were struck by a different man. Two animals were struck eight times apiece, and others nine times before the butchers saw fit to proceed to dress the beef. Although the earlier blows were ineffectual, the later ones were delivered when the animals had lost sensation, and when the convulsive movements appeared too violent. In other instances one, two, three, or four blows were required. Animals were partially struck down, and did raise their heads, and look about, unquestionably conscious of pain. The ox is not by any means the only animal that may preserve consciousness after being struck down by a blow upon the head. We ourselves know this from personal experience. However, one blow well applied was sufficient, perhaps, in the majority of instances, instantly to destroy sensation.

Two other cattle which I saw killed at my third visit were attacked by a third man. The first received three blows upon the head, but still the animal walked about, and it became so difficult to induce him to stay still in proper position (the unreasonable creature!) that the butcher resolved to devote his attention to another animal, upon which, also, he delivered three heavy but ineffectual blows. I noticed by this time that the first animal was bleeding from the nose, and that both were able to walk about. The heavy hammer would sometimes bound from the skull as you might expect a wooden mallet to do. The animals gave no cry, and made no violent demonstration, as one might

expect; they received these murderous blows as a prize-fighter might receive his, without evincing pain. They, however, became uneasy, endeavored to avoid the man crouching above them, and, without much trouble, were finally dispatched.

As to whether a bullock is so sensitive as to suffer terror or agony, in witnessing the deathblows and sufferings of his companions, interesting metaphysical questions are involved. Butchers in the abattoir do not seem to think that the animals are conscious of their surroundings. They say they occasionally milk a cow in a cage near which animals are being slaughtered. It is quite evident that, as a rule, bullocks make no attempts, or the most ineffectual attempts, to avoid the fate of their companions. In one instance which came under my observation, the last of a series of bullocks became frightened; he dodged the blows, put his head through the bars, and held it low, out of the reach of the butcher standing on the top of the cage. Men with sticks poked him about, while inaccurate blows fell upon his head, until, after a disgusting struggle, he was dispatched. This animal seemed to me to act at the start as though he appreciated danger from witnessing the death of his companions. Butchers say that Texas steers give more trouble than others, and are more liable to grow wild at the sight and smell of blood. It can not be that their mental powers are radically different from those of other varieties of oxen.

It is not necessary to repeat before this Society anecdotes or proofs to show that a steer may become frantic at the sight and smell of blood. Carnivorous animals are not so susceptible. A dog may even eat another dog, as one of our proverbs says, and yet some dogs are capable of sympathy, and exemplify it by appropriate behavior. Not only the elephant, but even so small a creature as the ant, manifests sympathy. The sense and understanding are not the prerogatives of man exclusively. These lower animals have attention, memory, association. They exhibit generosity, gratitude, courage, caution, patience, industry, anger, and grief.

Doubtless the ox or the sheep or the pig can not claim the possession of all these qualities. But their mental system is much less perfectly understood than ours. "The popular tendency has been to underrate the acquired knowledge of animals, if not to ignore it altogether. At present

we are not in a condition to dogmatize, owing to the want of proper observations on the whole department of brute intelligence." As Lauder Lindsay puts it, "the very terms animality and humanity are, on the one hand, unnecessary distinctions; while, on the other, they are generally wrongly applied, for there is more animality in man and humanity in animals than our self-conceit will permit us willingly to recognize. We can not correctly speak of the animal in contradistinction to the human mind, inasmuch as mind is essentially the same in other animals as in man, differing simply in the degree of its development and the mode of its expression."

But what can be done to remove the objectionable features of this necessary work of slaughter?

1. The work of killing these animals should be given only to a man of experience and power.

2. It is not necessary, and it should not be permitted, that animals should witness the death of their fellows. They may wait their turn together, but finally should be led to an apartment alone, where a single successful death-blow may be given.

3. Means should be provided for making this blow unerring. A crushing blow on the brain-case is, undoubtedly, a painless death, and, by a mechanical contrivance, this might be made unailing. Fixation of the head would be necessary, and perhaps could be accomplished by means of the horns. An experienced executioner, with an adequate instrument, either in his own hands or under his control, could then dispatch these poor brutes with the minimum of pain.

4. The number of men who perform this work should be small; and boys, women, and the public generally, should not be permitted to witness these brutalizing scenes.

5. The Jewish method, when rapidly performed, is, on the whole, not a cruel method.

6. The city should take immediate steps to supervise this abattoir; it should have an official inspector of meat, and adopt some effectual, scientific method for the detection and condemnation of diseased meat.

If this Society will indorse these statements, I believe that a better state of things can be secured. If proper evidence can be adduced, the Society for the Prevention of Cruelty to Animals will take hold of the matter and insist on reform



in this important public institution.—*Philadelphia Neurological Society.*

### Waxham: Treatment of Croup.

IN the treatment of this disease the author approves of trypsin as one of the most, if not the most, valuable agents for dissolving the false membrane. His formula is:

R—Fairchild's ext. pancreatis, . . .	gr. xv;
Sodæ bicarb, . . . . .	gr. iij;
Aquæ dist., . . . . .	
Glycerine, . . . . .	aa 5ss.

The mixture may be used with an atomizer, and great pains must be taken that the spray may reach the affected parts. Lime water is mentioned as an excellent solvent, but only when the membrane is immersed in it. The vapor from a boiling solution does not dissolve it, as was shown by exposing a large fragment of false membrane to the vapor constantly for three hours. In the given experiment the membrane was neither disintegrated nor softened. The author admits, however, that benefit may be derived from the heat and moisture of the vapor. The same piece of membrane which was exposed to the vapor was placed in a two-ounce phial which contained an officinal solution of lime water; in seven minutes it had been completely dissolved. Another piece of membrane was subjected to a spray from a hand atomizer which contained the pancreatin solution according to the formula already given. It was sprayed four times at intervals of half an hour, and, at the end of that time, the membrane was disintegrated. Again, a similar piece of membrane was sprayed with officinal lime water every half hour, and was dissolved after six applications. A spray of a ten per cent. solution of lactic acid softened the membrane in three hours and a half, being used, as in other cases, at intervals of half an hour. The membrane was not completely disintegrated however. The conclusions which were reached were: (1.) A solution of pancreatin with soda and glycerine furnishes the most satisfactory solvent. (2.) The spray of lime water will dissolve false membrane, but not so efficiently as the pancreatin. (3.) The vapor from boiling lime water is of no use as a solvent. (4.) Lactic acid is not a good solvent.

O'Dwyer's method of tubing the larynx in croup receives unqualified praise. Its advantages are: (1.) The tube can be introduced and without danger. (2.) There is no mutilation. (3.) No wound as a cause of shock, or source of infection. (4.) The tube can be worn more easily than a tracheotomy tube, and without greater hinderance to coughing and expectoration. (5.) It does not require constant attention as does a tracheotomy tube. (6.) Bronchitis and pneumonia are less likely to occur than where tracheotomy has been performed, the respired air being warmed on its way through the natural air passages. (7.) The operation is less likely to be objectionable to the parents.—*Archives of Pediatrics*.

---

### Dr. Fordyce Barker on the Value of Permanganate of Potash in the Treatment of Amenorrhœa.

---

IT has been some five years since Drs. Ringer and Merrell first called the attention of the profession to the value of manganese in the treatment of amenorrhœa and other disturbances of the uterine functions. Since this announcement was made this drug has been employed by a number of careful observers in the treatment of the conditions mentioned, and the reports which have been published have tended to confirm the favorable opinion expressed by Drs. Ringer and Merrell. The drug has undoubtedly disappointed some practitioners who have used it, and adverse reports have been a natural result of its indiscriminate employment. There are certain conditions of the generative function in which amenorrhœa is but a natural result, conditions in which manganese is as likely to fail in its duty as any other of the numerous so-called emmenagogues which are employed. Every one who has had a large experience with those articles of the materia medica which are classed as emmenagogues must have realized the fact that in certain cases these agents will fail, and the uterine function will remain uninfluenced by their action. It is, perhaps, in this class of cases that manganese will be found of little value in establishing the periodic flow of blood from the uterus. There can be but little doubt, however, of the fact that manganese is almost specific in its action in overcoming amenorrhœa in a large number of cases. Proof of this assertion will appear when the literature of this subject is

carefully studied. We have before us a very valuable contribution to this subject from the pen of Dr. Fordyce Barker, of New York (*New York Medical Journal*, February 27, 1886), in which an experience is related which greatly strengthens this statement. Dr. Barker has used the permanganate of potash almost exclusively, when an emmenagogue was indicated, for the past four years. The class of cases in which he has employed it are arranged in the following groups:

"*First*.—Young ladies between the ages of fourteen and nineteen, who come from the country 'to finish their education.' Home-sickness, entire change of their habits of life and associations, overtax of their brain power from their own or their teachers' ambition to accomplish more in a given time than they ought to attempt, not infrequently lead to an arrest of menstruation. I see at least ten or fifteen such patients every winter.

"*Second*.—Ladies, both young and married, who suffer severely from seasickness, that have left some European port within a few days of the menstrual period. With such, amenorrhœa, of longer or shorter duration, is almost sure to follow. I am consulted by at least eight or ten such every year.

"*Third*.—Ladies between thirty and forty, generally married, some of whom have borne children, who rapidly begin to gain flesh, grow stout, while, at the same time, menstruation decreases in both duration and quantity, until at last it is only a mere pretense. This is generally attended with annoying nerve disturbances, pelvic weight, sometimes hæmorrhoids, and often mental depression from the apprehension of growing old prematurely."

*Dr. Barker* now avows that never, where in either of these classes of cases that he has prescribed the permanganate, has he *known* it to fail. In prescribing the permanganate, he directs the patients to continue the use of the medicine, if necessary, for at least three months, and he especially urges them to report to him, either personally or by letter, if the end is not accomplished. With this specific treatment, Dr. Barker has, however, not neglected any other measures necessary to keep up a healthy and regular action of other functions. He is also careful never to prescribe the permanganate in cases where the amenorrhœa is due to some grave constitutional disease, nor does he rely on it for

the relief of sudden suppression due to cold, moral shock, or an acute disease.

Dr. Barker has experienced the same difficulties in administering the permanganate as have been reported by others who have prescribed the drug. It is well known that the permanganate undergoes rapid decomposition, and that it will produce, in most persons, severe gastric pains. Indeed, it is taken with great repugnance, as a rule. To overcome the peculiar taste and unpleasant effects of the drug, Dr. Barker has adopted the plan of giving it in two-grain tablets, and immediately thereafter administering a half-tumbler of water, not cold. He usually prescribes two grains three times a day. Dr. Barker gives, as the result of his clinical experience with the permanganate of potash, a report of forty-three cases of amenorrhœa, of the groups mentioned, and, at the time of writing, he is not able to recall an instance where he made a domicile visit for this disease.

It is well known that Dr. Barker is an exceedingly careful observer and accurate reporter. His experience with the permanganate in amenorrhœa speaks volumes in favor of its judicious employment in the groups of cases in which he has obtained his results.—*Editorial in Maryland Medical Journal.*

---

### Hegar's Sign of Early Pregnancy.

---

THERE are few physicians who have not been consulted by anxious patients during the early weeks of pregnancy, who wished to ascertain the correctness of their fears, desires or imaginations respecting their condition, and every well-informed practitioner knows how utterly difficult, if not impossible, it is to make a diagnosis of pregnancy during the early weeks of gestation. It is true, there are numerous signs, but to interpret them correctly is not a light task, nor is it an easy duty. The necessity of a positive assurance of the non-existence of pregnancy is frequently experienced by the gynecologist. Cases present themselves for treatment where this doubt must arise, and where local treatment must be held in abeyance until the doubt is solved. He must be a gynecologist of limited experience, or a poor student of human nature, who has not now and then observed upon the part of a few crafty females a certain desire for local treatment when suspicions pointed to a pos-



sible conception. It is a happy circumstance that such occurrences are extremely rare, but we believe the incautious and non-suspecting practitioner may now and then be led into a grave error of practice if his eyes are not keenly open to this fact. In the absence of a positive assurance of a non-existence of pregnancy, the sole course open is to defer local treatment until the doubt can be solved. This may lead to much unnecessary delay and to unpleasant embarrassments, but it is the only safe rule of action. The question arises: Can the diagnosis of pregnancy be established with certainty as early, even, as the fifth week of utero-gestation? In our opinion, it can not; but there are observers who differ with us. For example, Hégár offers a sign which he claims is present as early as the fourth week. Quite recently, Dr. E. H. Grandin, of New York (*New York Medical Record*, February 27th), has asserted that he had frequent opportunity of putting Hégár's sign to the test, and that he has, by means of it, been able to assert as early as the fourth to the sixth week that gestation existed. In order to make Dr. Grandin's experience show to the best advantage, we quote his language:

"Since my object is to call attention to this sign of Hégár's, and not to rehearse the signs which, in the early months of pregnancy, point to this condition, I proceed at once to its consideration; and, in order to make the sign clear, would call attention to the gross changes which take place in the uterus prior to the second month of uterine gestation; that is to say, before any classical physical signs—such as discoloration of the vaginal mucous membrane, softening of the cervix—have become at all marked. The early rational history I purposely leave out of the question, for such history our patients frequently falsify.

"During the first six to eight weeks of pregnancy the changes in the uterus are practically limited to the body of the organ. The uterine body enlarges, especially in its transverse diameter (antero-posteriorly); the muscular substance becomes less dense. These changes are simply the result of the hyperæmic condition into which the corpus is thrown and kept by the engrafting of the impregnated ovum. As the result of such changes, the uterine body loses its nulliparous pear-shape; its contour no longer gradually diminishes as it approaches the uterine neck; the body, on the contrary, bellies out (if I may use the term) over the cervix in all the transverse diameters, in particular, antero-

posteriorly, and the organ, instead of being pear-shaped, resembles very much an old-fashioned, fat-bellied jug.

"The above changes in the consistency and shape of the body of the uterus constitute Hégar's sign, and, so far, in at least a dozen cases, it has never failed me in early diagnosis. The obtaining of this sign requires, of course, a certain expertness in the bi-manual palpation, and familiarity with the sensation communicated to the finger by the nulliparous uterus, and the uterus altered pathologically in one or another way. I have found, however, in my clinical teaching, but little difficulty in making even inexperienced fingers conscious of the change. In the vast majority of cases, owing to the normally slight anterior curvature of the uterus, the internal examining finger will note this sign to the best advantage in the anterior cul-de-sac. Here the finger, instead of following the line of the cervix in a gentle curve up on to the body, is at once conscious of the body swelling out to a greater or lesser degree, according to the date of impregnation, over the cervix, and, at the same time, bi-manually, the body is faintly boggy, resilient, compressible. If such be the condition of affairs detected by the local examination, in the absence of rational history, in the absence of slight softening at the tip of the cervix (which may, if present, mean erosion), and of mammary signs and blue discoloration of the vagina (both of which, if present, may mean ovarian disease), I now unhesitatingly pronounce the patient pregnant."

Dr. Grandin points out the conditions which may possibly simulate Hégar's sign; first, a distended bladder, and, second, a uterus distended with menstrual blood. Neither of these conditions, however, he says, ought to give rise to error, for a necessary prelude is a careful bi-manual evacuation of the bladder by means of the catheter, and retained menstrual blood would necessarily be suggested by the history.

Hyperplasia of the corpus uterus, sub-involution and the varieties of displacement, he claims, may be determined by the compressibility, resiliency and other changes in the uterus which are incident to these special conditions.

Dr. Grandin seems to have had remarkable success in testing this sign of Hégar. In eleven cases in which an early diagnosis was made by this sign, the correctness of the diagnosis was established by after-observation. We regret to say, however, Dr. Grandin has not stated the fact as to

whether he had met with a failure in any case in which the test was employed. He tells us very frankly, "in order to settle the value of this sign positively, it is, of course, apparent that others must note the result of their experience. As the matter now stands, Hégár believes this sign to be of great value. Compes regards it as positive, and I am inclined, from a limited experience, to consider it infallible."—*Maryland Medical Journal*.

---

### Effects of Poisons on Ascarides.

---

VON SCHROEDER has been making a series of experiments with the view of determining the effects of certain poisons on thread worms, and has communicated the results to the *Archiven fuer exper. Pathol. u. Pharm.* From this exhaustive report we make the following condensation: The particular forms of ascarides experimented upon were the *ascarismys tax* which infests the domestic cat, and the *ascaris lumbricoides* which, besides its human host, is also found in the hog. The worms were kept in water in which were dissolved one per cent. of common salt and one-tenth of one per cent. of carbonate of sodium, the temperature being maintained at from 98° to 100° F. The evidence of life in both forms of ascarides consisted in continuous and rapid movements. The cessation of these movements, however, was not accepted as proof of the death of the animals, as hours after voluntary motion had apparently ceased, reflex movements could be excited in them by the use of certain stimulants—notably heat. The observer found that while both alkaline liquors (lyes) and acids had a very powerful effect on the ascarides, the carbonates of the alkalies seem to affect them but slightly. Alcohol, chloral hydrate, strychnine, morphine, helleborine, aconitin and quinine had very little effect upon them—as they lived generally three hours after being subjected to the influence of these drugs. Physostygmmin, coneine, pelletierine and picrotoxin were even less efficient, as signs of life were detected as long as twenty-four hours after the use of this series of poisons. Under the use of veratrin, life was detected sixty hours after administration. Nicotin, on the contrary, acted most energetically. In a solution so weak as one part of nicotin in 20,000 parts of water ( $\frac{1}{2}$  grain to 42 ounces), the longest period of resistance was one hour and thirty-nine minutes. Sublimate has a

moderately powerful effect, but potassium cyanide is much slower, resembling in its action the toxic methods of the alkaline liquors. While carbolic and salicylic acids acted quickly and powerfully, their salts were almost inert. Arseniate of sodium had but a weak effect, and the same is to be said of picrate of sodium, benzoic acid, naphthalin, camphor and oil of camphor. Of great interest were the experiments with kamalin and santonin. In a solution of the former (1 : 150) the ascarides lived forty hours, while a similar solution of santonin seemed to have absolutely no effect upon them. In solutions of santonin in castor oil (1 : 150) the ascarides lived for fifty hours apparently happy and contented. On increasing the proportion of santonin to one and a half per cent. ( $7\frac{1}{4}$  grains to the ounce), the mixture was fatal only at the end of fifty-two hours. These experiments seem to show that santonin is not poisonous to the ascarides, but (—and therapeutics substantiate this view of the matter) it sickens them and drives them out of the small intestines into the colon, whence they must be dislodged by means of purgatives. Since such is the case, the custom of giving santonin and following it up with oil or other purgatives after the lapse of several hours, is a useless waste of time. The vermifuge and purgative should be combined, or given at one and the same time. In conclusion the author states as the result of a further series of ingenious experiments, that though the absorption of poisons by these creatures takes place through the integument, they will take them into the alimentary canal through the mouth, if the poisons be dissolved in a medium for which they have a natural appetite—peptones or cane sugar syrup.

---

### Methods of Diagnosis.

---

MR. LAWSON TAIT, of Birmingham, forwarded a paper to the New York State Medical Society on methods of diagnosis, from which we give the following (*Med. News*). He maintained that the speculum and the sound, as means of diagnosis, have been productive of uniformly more harm than good. That a blennorrhagic discharge from the vagina of any patient requires the introduction of a speculum, is one of the stock beliefs of the great bulk of general practitioners, but it is certain that nothing of the kind is requi-



site, and a very large amount of mischief, there can be no doubt, has been produced by this belief. It is not at all an unusual thing for him, on taking part in a consultation with the family physician concerning some such case, to be told by him that he very much regretted that he had not made an examination with the speculum. Others have told him, that they made the said examination, and when asked what they saw, or what they did, the answers usually given are that they did nothing, they merely made the examination; that is to say, they passed the instrument and with that proceeding were perfectly satisfied, evidently under the belief that the passage of the speculum was quite as much a curative agent as a method of diagnosis. Similarly with the sound, he had heard many practitioners tell of their experience with the sound, or rather their want of it, and he judged that they looked upon it as a sort of magical charm, the introduction of which into the uterus was to achieve unmeasured good. As a matter of fact, the sound is one of the most dangerous instruments which ever was invented for the treatment of human suffering, and in his own practice obtains hardly any employment at all.

There is a story which is told against himself by some of his colleagues which he never hesitates to repeat, because it is the kind of accident which is liable to occur to any one, and fortunately the only one of its kind which ever happened to him. It conveyed a lesson of which at the time he stood much in need, and from which warning may be taken with advantage. Many years ago he was asked by the surgeon of a large general hospital to give his opinion on the case of a young woman, who had been in the hospital for some months suffering from a pelvic tumor which seemed to threaten her life. She was hectic, suffering and very ill. The tumor on one side of the pelvis was apparently quite fixed, and he expressed the opinion that it was a collection of matter, but in what position he could not say unless she would allow him to make use of the uterine sound. His surgical friend told him he could do exactly what he thought proper. He had asked for his opinion as a specialist, and he would not interfere with any steps he thought fit to take for the purpose of furnishing him with that opinion. Mr. Tait immediately proceeded to use the sound, and came, quite erroneously, to the conclusion that the patient was suffering from a parametric abscess. The sound passed, as he thought, into an empty uterus, fixed

toward the right side, the uterus being of normal length. Within twenty-four hours the patient miscarried of a fourth-month foetus, and this ended all her sufferings. She speedily recovered and left the hospital cured in a way which nobody expected, and which certainly he did not intend. All such accidents have by no means so happy an ending as this had, and their number is immense. But few months pass without his hearing of a case in which some kind of mischief has been done in this way.

One of the most important methods of diagnosis in abdominal disease, and the first to be considered in examining any case, is inspection. A careful examination, by the eye, of the contour of an abdomen when the patient is lying on her back, with the walls of the abdomen perfectly flaccid, will reveal a good deal to the experienced practitioner. A completely and uniformly distended abdomen may mean that the patient is suffering peritonitis, intestinal obstruction, ascitic effusion, a parovarian tumor, an ovarian tumor, a large myoma of the uterus, or pregnancy. The process of discriminating between these various conditions may very rapidly be completed by one who is accustomed to deal with them. Thus peritonitis may be at once detected or eliminated by the presence or absence of the short and rapid pectoral breathing, which shows that the patient is loath to use her diaphragm. In fact, by this alone, and without almost any further inquiry, he has satisfied himself as to the nature of the case by a single glance. Ascitic effusion, on the other hand, is revealed at once by the absence of the pectoral breathing, by the greater flattening of the distention, by its tendency to assume a pyriform shape, the broadest diameter just above the pelvis, by the thickening of the walls due to anasarcaous effusion, and the presence of white lines in the skin of the flanks. If the crest of the ilium sticks out under stretched skin, the diagnosis is again almost complete without further inquiry. If, on the other hand, these subsidiary features are absent, and there be a uniform and complete distention, two conditions widely distinct may be suspected. These are parovarian cyst and hydramnios, and here, again, some very curious mistakes have come under his notice, some of which have had very ghastly results. Parovarian cysts after labor sometimes grow with astonishing rapidity. Hydramnios always occurs with twin pregnancies, and generally in unmarried women, who are, of course, disposed to conceal

their condition, and mere inspection can not be depended upon to discriminate these cases.

But inspection will help us very largely to detect pregnancy and myoma, for in these cases the distention is always greatest either at the middle of the tumor or at its upper part, differing in this way completely from ascitic distention; and here one of the most important agents in the diagnosis of abdominal diseases, palpation, comes at once to our assistance, and to the skilled fingers it ought not to take more than a few seconds to discriminate between any or all of these conditions. The percussion note, which is uniform in a case of peritonitis, will easily determine the condition which is present. One or two delicate touches of the fingers of one hand whilst the fingers of the other lie with the most gentle lightness on the other side of the abdomen, will determine the presence of fluid, and it is in this method of palpation that the skill of the practitioner at once becomes visible. The inexperienced hands press firmly upon the walls and may be seen to move to and fro in an aimless fashion as though they were rocking a cradle. The gentlest and tenderest touch alone will reveal what is required. Measurements of the different diameters of the abdomen will teach in a few seconds the leading features which are present: first, that there is fluid; secondly, that it is, or is not, near the surface, being contained, or not, within a thin-walled cyst; thirdly, that there is one cavity, or not; fourthly, the probable character which it presents. The wave excited by gentle tapping is retarded or urged on by the more or less gelatinous nature of the fluid. All these conclusions are indicated with the utmost rapidity to the skilled fingers, and it is absolutely impossible to teach how this can be, save by the constant practice of the pupil. The parovarian cyst may be diagnosticated entirely from one condition, that is, hydramnios, partly by its thin walls and partly by the fact to which he has alluded, that hydramnios is very easily detected. Ascitic fluid is revealed in the same way, and by the additional fact that here and there we get tympanitic percussion notes.

The large uterine myoma is defined by its firm sense of resistance and its uniform feel and pseudo-fluctuation, also by the fact that it has a smaller diameter at the base than at the middle or upper part. Pregnancy, the rock ahead to inexperienced practitioners, can be infallibly revealed by palpation. First of all, there is fluctuation due to the

liquor amnii, and it can be easily detected, and this declares the cystic nature of the mass. If the hand be made to lie gently on the parietes for a few minutes, a rhythmical contraction of the uterus, by which at one time it is hard as a cricket ball and at another soft as a cushion, will become perfectly apparent, and this is an infinitely more certain sign than the sound of the foetal heart or placental bruit. The foetal heart is a sound which may guide and sustain the practitioner in his conclusions, but it is so easily imitated by intestinal noises, and often so difficult to find, that it is not to be depended upon with certainty. The placental souffle is probably more easily recognized than the foetal sounds, but placental sounds are very often, in rapidly growing tumors of the uterus, so completely imitated that there is always a certain amount of doubt connected with them. But the relaxation and contraction of the uterus in pregnancy are points in diagnosis which, when once made apparent, can never be mistaken for anything else.

---

### The Influence of Drugs on Milk.

---

In a medico-legal case MM. Brouardel and Pouchet were asked whether an infant of two months could have been poisoned fatally through its mother's milk, the mother having been for some time under treatment with arsenic, and on several occasions having shown symptoms of arsenical poisoning. To settle the point M. Brouardel made a number of experiments by giving Fowler's solution to nursing women, the result of which showed that arsenic can readily be found in the milk, even when taken in small doses, but that no toxic symptoms are likely to be produced in the child unless the mother be taking a toxic dose.

Fehling has lately experimented upon the subject of the elimination of drugs by the milk, and found that salicylate of soda, iodide of potash and iodoform can all be traced to the urine of the nursling, the latter drug when taken in very small quantities, and even when applied externally. Hence, he advises against its use as a dressing for wounds in nursing women. He has also found corrosive sublimate in the urine of children whose nurses had the drug applied externally, but the quantity passing to the child was so small that he thinks it unnecessary to use the same precautions with corrosive sublimate as with iodoform. The



narcotic substances are without effect upon the nursling. The largest doses of opium or chloral administered to the nurse do not bring about any especial symptoms in the child. Atropine was tried on animals, and no dilation of the pupil or other manifestations occur in the suckling, excepting when the maximum therapeutic dose has been exceeded. Fehling therefore comes to the conclusion that while but few drugs administered to the mother prove deleterious to the infant, a strong exception, however, should be made of those substances that are eliminated with difficulty and accumulate in the organism. Nevertheless it is certain that many substances, when ingested, produce decided effects upon the milk. "Milk sickness," or the "trembles," occurs in persons using the milk of cows which have fed on certain pasturage, and the odor of copaiba or asparagus can be detected in the child's urine when these substances have been taken by the nurse; moreover, artichokes, absinthe and other substances will make the milk bitter.—*Northwestern Lancet*.

---

### Diphtheria.

---

WITH regard to the treatment of diphtheria, I know of nothing too strong to say in the reprobation I think we ought to show toward the treatment by scraping off the membrane; and that by mopping or swabbing the throat with nitrate of silver and other astringents is nearly as bad. It forces the fungus to extend to unastringed portions of the mucous membrane, and drives it downward toward the glottis, and I believe it to have been answerable for multitudes of deaths in former less enlightened days. I believe it is a plan never now adopted, unless it may be by the gentlemen who call all white patches in the throat diphtheria. It is excellent treatment for simple ulcerative tonsillitis.

Arguing from analogy, and seeing the success in vineyards of the use of sulphur for the cure of oidium, I think this is the most rational line of treatment to adopt to destroy the fungus of diphtheria. Finely powdered sulphur blown on to the membrane through a quill or glass tube causes no pain and very little distress to even very young children, and in such cases it is almost the only local treatment that can be adopted. With children a little older, sprays are very useful. Carbolic acid spray is, in my ex-

perience, useless as a germicide, because the mouth and throat will not tolerate it of sufficient strength to destroy the vitality of the false membrane; but in a strength of 1 in 60, or 1 in 80, it is very soothing to the inflamed throat. Boracic acid spray, on the contrary, is extremely useful, for it appears to have the power of dissolving the membrane whose vitality the sulphur has destroyed, and thus a fresh layer is exposed for the next applications of sulphur to act upon. Where the diphtheric patches are very thick, it is a good plan to syringe a concentrated solution of boracic acid over the throat in a child who is too young to use a gargle. If it is swallowed it does no harm. In older children and adults it acts to best advantage as a gargle, removing the membrane in flakes and not irritating the throat. I have not used pepsine, as I have been thoroughly satisfied with sulphur and boracic acid for local treatment; but its use is thoroughly scientific on physiological grounds. We aim, of course, first at the destruction of the local manifestation of the disease in consequence of its tendency to cause death by asphyxia; but it does not follow that because the throat becomes clean the patient is out of danger. Therefore we ought to aim at the destruction of the poison in the blood from the earliest period of seeing a case. I believe that in the sulpho-carbolates we have a group of substances that are capable, if not of destroying what already is formed there, of preventing a further development of the disease, and so controlling its progress. In the allied diseases of scarlatina and erysipelas it displays marked powers of modifying their course, and, again arguing from analogy, I think it is a scientific proceeding to administer them. I give the soda-salt in doses of a grain for each year of the child's age every three or four hours. The temperature quickly falls, and then the sulpho-carbolate can be discontinued, to be replaced by perchloride of iron.—*Dr. Corbin in Australasian Med. Gazette.*

---

POWDERED RICE AS A STYPTIC.—According to the *Indiana Medical Gazette*, powdered rice is stated to have marked hæmostatic properties. Mixed with lint, in proportion of from four to eleven per cent., the lint thus treated being used as a compress, it is more effectual than oxide of zinc, subnitrate of bismuth, salicylic acid, or carbolic acid.—*N. Y. Medical Journal.*

## Microscopy.

HOMOGENEOUS OBJECTIVES.—Mr. Ernst Gundlach, the distinguished maker of microscopic objectives, of Rochester, N. Y., in a paper that he read before the American Society of Microscopists, at their last meeting in Cleveland, O., states that he does not believe that the high optical superiority of the modern homogeneous immersion objectives over the old water immersion is due to the fact of their being homogeneous immersion, but that it is due to the increase of the number of lenses they possess, and, consequently, to the number of refracting surfaces. The old water immersion objectives were all three-system lenses, while the homogeneous glasses are all four-system. He says that while it is unnecessary to enter into a thorough theoretical investigation of this matter, it may suffice to call to mind the fact that the aberrations of higher order are inversely proportional to the number of refracting surfaces. "The objection that there is also a corresponding loss of light, although practically true, is of no consequence whatever, as is sufficiently demonstrated by the extensive experience in the use of this class of objectives." Summing up, he says: "We come to the conclusion that the future high power objectives will be four-system water immersion. Or the immersion will be done away with altogether as an incurable inconvenience, and the four-system dry-working objective will be used."

DISEASE GERMS.—In a paper read before the American Society of Microscopists, and printed in their proceedings, Dr. Lester Curtis, of Chicago, says that in order to be sure that a disease is caused by any germ, five conditions must be fulfilled: "1. It must be found in the blood or tissues of every one affected with the disease. 2. It must not be found in the body of persons not affected with the disease. 3. It must be cultivated outside of the body in such a way as to insure its freedom from other forms, and for generations enough to be sure that it has been freed from any other poison contained in the body. 4. This pure culture must then be inoculated into the body of some other person, and the original disease must result. 5. The germ must be found in the last case. If any one of these steps is wanting, the proof of the causation of the disease is incomplete."

Dr. Curtis states that there are two methods of culture in use; the culture in fluids, and that on a firm soil. Culture in fluids has several disadvantages. In the first place, any part of the body to which air can gain access will contain several forms of bacteria, as in the case of pus from an ulcer, sputum, etc. It is impossible in fluid cultures to separate these forms and detect which one is the cause of mischief. But even if pure in the first place, it is difficult to keep cultures entirely free from contamination, from germs contained in the air, and other sources. In fluid cultures, on account of the mobility of most forms, these impurities become thoroughly mixed with the original forms, and it is impossible to distinguish one from the other. Indeed, many forms are inimical to each other, and the intruders may destroy the original forms and leave something entirely different in their place. Dr. Koch has, therefore, devised his method of cultivation on a fixed soil. Several substances are used for this purpose, but the most common are peptonized beef broth mixed with gelatine and the potato. The bacteria are unable to move on these materials, and if an impurity finds its way into the culture it can be detected and removed. The preparation of peptonized gelatine is as follows: 250 grammes of fresh beef, as free as possible from fat, is chopped fine, placed in 500 grammes of distilled water, and allowed to stand over night upon ice. The mixture is then shaken repeatedly and pressed through a fine cloth; distilled water enough is added to make 400 cubic centimeters; to this, 4 grammes (1 per cent.) of "*peptonum siccum*," 2 grammes of common salt, and 40 grammes of fine white gelatine are added. This mixture is allowed to macerate for about half an hour, and is then warmed in a water bath so as to melt the gelatine without precipitating the albumen. It is then carefully neutralized with a saturated solution of bicarbonate of soda, adding the solution, drop by drop, until blue litmus paper remains blue, but red paper shows a slight blue tinge. For the cholera bacillus will grow only when the exact stage of neutralization is reached. In case the mixture has become too alkaline, a little lactic acid should be added. The mixture is then boiled for half an hour to an hour, in order to precipitate the albumen; filtered, and, if not quite clear, boiled and filtered again. It should then be tested again to make sure that the reaction has not changed, which it is somewhat liable to do. By this cooking, the color of the mixture is changed to a faint



yellow. After boiling, the mixture is filtered into microscopically clean vessels, and again boiled until no cloudiness appears. It should then be clear and of a topaz yellow color. The mixture may be preserved in test tubes which have been stopped with cotton and sterilized by heat. In laboratories it is usual to have an oven, which can be kept at a uniform high temperature for this purpose. The temperature required to be maintained is from  $160^{\circ}$  to  $180^{\circ}$  centigrade, continued for an hour. If the tube is cleaned and a plug of cotton placed in the mouth, it can be easily sterilized by heating in the flame of a Bunsen burner, or alcohol lamp.

Having secured the sterilized gelatine, we are prepared to begin the cultures. These cultures are of two sorts: plate cultures and needle cultures. Plate cultures are for the purpose of securing the germ in a pure state. For this purpose there are provided a series of glass plates about four inches by six, and some benches made of strips of glass about six inches long and two inches wide, to the ends of which have been cemented strips of glass about one-quarter of an inch in thickness. In order to protect these plates from dust, the laboratories are provided with flat and low glass shades, similar to the cake covers used by confectioners, which fit into shallow glass vessels—these are called moist chambers. If these are not at hand, however, the confectioner's cake cover and a dinner plate, or even two soup plates, will do very well. A platinum wire about one and a half inches long, melted into the end of a glass rod, and a similar one bent into a loop at the end, and an ordinary glass stirring-rod are also necessary."

But for full particulars as regards the cultivation of bacilli, we must refer the reader to the paper of Dr. Curtis. We have quoted sufficient only to give a sort of an outline.

The cholera bacillus, he says, does not form spores, and is not found in the blood or in any organ of the body except the mucous membrane of the intestine. It does not grow in acid fluids, consequently, persons with vigorous digestions are not liable to cholera. It is only persons whose digestion is temporarily arrested who are liable to the disease, as is shown in the history of epidemics.

Dr. Lester states, that giving bacilli by the mouth to lower animals has not caused the disease, owing, no doubt, to the great activity of their digestions. It is well known that they are not subject to cholera, probably for this reason. Injec-

tions into the intestinal canal, however, have given rise to symptoms exactly resembling cholera, with large numbers of the bacilli in the dejections and in the intestinal canal.

---

## Gleanings.

---

**TUBERCULAR MENINGITIS IN CHILDREN.**—*Liverpool Medico-Chirurg. Journal.*—This paper is based on a study of forty-six cases and forty-one autopsies. In nineteen of the latter series there was only slight opacity of the membranes, in twenty-two there were well-marked deposits of yellow lymph. In nine, caseating masses were found in the brain. In every instance, there was a great excess of fluid in the ventricles.

In forty of the forty-one cases in which the whole body was examined, there were cheesy deposits either in bronchial or mesenteric glands, or tubercular deposit of the same nature in the lung, liver, kidney or bone.

Of sixty-three cases, forty-eight were between two and seven years of age, and no case was over ten years old.

Caseation of bronchial and mesenteric glands from persistent catarrh in the lungs or intestines is an important factor in the etiology. These are believed to act as foci of infection. Heredity has a great deal to do with this tendency to caseation; but the statement that tubercular meningitis is brought about by overstudy, poverty, bad feeding, etc., finds no support in the facts adduced in the author's experience. Great importance is attached to the observation of premonitory symptoms, as when a previously robust child loses flesh, tires easily, becomes fretful and irritable, loses appetite, complains occasionally of the head, has disturbed sleep, horrible dreams and constipation. These may last for months, but an attack can often be avoided by prompt measures. Iron, cod liver oil, the bromides, change of air, etc., may arrest the disease, and a perfect return to health be brought about. The author has seen recovery even in cases where the disease was fully developed. It is often only partial, the child remaining feeble-minded for the rest of its life.

In diagnosing this disease from general tuberculosis, in which the predominance of the lesion is elsewhere, the brain being very slightly involved or free from disease entirely, great importance is attached to the temperature.

In the latter it is always higher than in the tubercular meningitis, varying from  $102^{\circ}$  to  $104^{\circ}$ , while in meningitis it usually ranges from  $99^{\circ}$  to  $101^{\circ}$ .

He draws the following conclusions:

1. Tubercular meningitis is not a disease *per se*, but owing to the fact that ventricular effusion, when excessive, produces death rapidly, it is convenient to consider this phase of the general disease separately.

2. Ventricular effusion is caused by occlusion of the vessels by nodular growths of tubercle in their walls.

3. The disease is rare after ten years.

4. Great attention is to be paid to prophylaxis. A sudden change in disposition under the circumstances before noted, should lead to a careful examination of the pulse and temperature.

5. Confinement in close rooms and worry of lessons may produce nervous exhaustion, and a child with a phthisical family history may develop, in consequence, tuberculosis, but not necessarily meningitis. The facts are, that the great mortality from this disease is before school age with most children.

6. Tubercular meningitis is nearly always associated with a caseating center which serves as a focus; infection being carried by the vessels probably.

Two chromo-lithographs showing the tubercular growths in the blood-vessels, and a tabular arrangement of forty-six cases, complete this exceedingly valuable paper.—*Archives Pediatrics*.

ON INFANTILE APHASIA.—Prof. Bernhardt, of Berlin, presents his views about infantile aphasia in a little pamphlet (*Deutsche Medizinische Zeitung*), from which we abstract some salient points.

1. Genuine infantile aphasia is not so common an affection as is commonly believed; about ninety cases are all that are recorded.

2. Its etiological factors are nearly identical with those producing the affection in the adult phases of life, with special consideration, though, of the various characteristics of childhood. The principal causes are reflex conditions after indigestion, entozoa, psychical irritation, infectious diseases, acute and chronic brain affections.

3. Infantile aphasia is chiefly a symptom of cerebral infantile paralysis.

4. Hemiplegia does not necessarily exist along with aphasia.

5. The affection may disappear spontaneously, especially after prudent and systematic physical exercise.

6. The nature of the cerebral lesion, in cases of aphasia existing since birth, is not known, since no autopsies are recorded. The therapeutics of the affection is little effectual; antiphlogistic measures at first, and later the galvanic current, together with the preparations of iodine and bromine, suggest themselves.—*Therapeutic Gazette*.

OIL OF EUCALYPTUS AND OIL OF TURPENTINE IN MEMBRANOUS CROUP.—Dr. F. A. Johnson, in a letter to the editor of the *Cal. Med. Journal*, narrates the following case:

Allow me to briefly report a severe case of membranous croup cured by me without tracheotomy. To perform this very hazardous operation would have been certain death to my little patient, on account of vascularity of the thyroid gland; I preferred to let the patient die a natural death. Feeling that all was not done that could be, and having but a few moments to work in, I took an atomizer, charged with oil eucalyptus and oil turpentine aa. q. s. and with the mouth well-opened I sprayed the mouth and throat with this mixture every 15 minutes for at least two hours, and from the first the patient breathed easier. At the same time I gave my patient a mixture of brandy and carbonate of ammonia, one teaspoonful as often as every 15 minutes, alternating with the spray. At the end of two and one-half hours the little sufferer was running about the room. I had discovered, several weeks previous, that the two oils would dissolve India-rubber, and made a record of the fact that if I ever had a case of this terrific disease, or of diphtheria, I would give the two drugs a trial. I will here state that as powerful and volatile as the two drugs are, they have no bad effect upon the mucous membrane, but will dissolve the false membrane very rapidly. Try it, my brother physicians, and report your success in your respective medical journals.

I do believe, beyond a doubt, that by a judicious use of these two oils, diphtheria and membranous croup can be cured without the use of the knife.

AN IMPROVED METHOD OF OPERATING FOR CLEFT PALATE.—A correspondent writes to *The Lancet* concerning what he considers a great improvement in the operation for cleft palate. Hitherto great difficulty and not a little danger



have arisen from hemorrhage during the operation, necessitating frequent and very skillful assistance, periodical discontinuation of the anæsthetic, and distinct intervals in the performance of the operation. In addition to these, other and minor troubles are experienced. All these difficulties may be avoided, and the operation rendered perfectly safe and easy, by the simple process of inversion as applied to the head only. This can easily be attained by bringing the patient's shoulders well up to the end of the operating table, and allowing the head to hang over the edge in the fully extended position. In this position the roof of the mouth would be horizontal or slightly inclined downward toward the operator, who should stand at the head of his patient. The anæsthetic is given through the nose by a small tube, and is quite out of the way of the surgeon. Only one assistant is required, who should stand to the left of the operator. In paring the edges no change of hands is required, but the corresponding hand should be used in elevating the tissues of the hard palate and in passing the sutures. Under these circumstances no blood can enter the larynx or œsophagus, the palate remains unobscured by blood, and whatever hemorrhage occurs finds its way into the nasal cavities, and at the conclusion of the operation may be emptied by simply turning the patient's head to one side.—*Med. Record.*

EXTIRPATION OF THE LUNG.—Dr. Domenico Biondi, of Naples, some time since proved that animals recovered after removal, by operation, of one entire lung. In a more recent communication, published in the *Wiener Medizinische Jahrbücher*, the same physician shows that animals may survive the removal of portions of lung artificially infected with tubercle. After injecting, by Ehrlich's method, masses of bacillus tuberculosis into the parenchyma of the lung, so that the clinical and anatomical symptoms of tubercle were produced, he removed, at the end of a few weeks, the diseased lungs; and in all cases recovery was complete. Whether pulmonary tubercle in man, not artificially produced, could be precisely diagnosed and localized to one lung, and then treated in the same manner, and whether total removal of the organ or excision of a diseased lobe would be, in such a case, the less perilous operation, are questions which can hardly be decided by the physicians and surgeons of to-day; yet, bearing in mind the surgical

procedures performed with success in this country, that were once considered impossible, and then unjustifiable, it is hardly unreasonable to believe that excision of the lung is an operation of the distant, if not of the immediate future.—*British Medical Journal*.

ASTHMA.—*To the Editor of the New England Medical Monthly:*

I have a most obstinate case of asthma which has resisted every form of treatment I have administered. The attacks or dyspnœa are terrible to see and very hard to relieve. Can you or some of your readers help me in this matter?

E. C. BISHOP, M. D.

Dr. Q. C. Smith in a recent number of *Gaillard's Medical Journal* recommended the following: For the paroxysms he administers hypodermically the following:

R<sub>y</sub>. Mur. Pilocarpine,  
Apomorphia, . . . . . aa gr.  $\frac{1}{8}$ .

M.

The patient will quickly sweat profusely, breathe easier and obtain sleep in ten minutes.

For the constitutional treatment he uses the following:

R<sub>y</sub>. Iodide of sodium, . . . . .  $\mathfrak{z}$  i.  
F. E. grindelis roburtus, . . . . .  
Tr. aloes, . . . . .  
Syr. ipecac, . . . . . aa  $\mathfrak{z}$  ij.  
Liq. pot. arsenitis, . . . . .  $\mathfrak{z}$  ss.  
F. E. belladonnæ, . . . . . gutts iv.  
Syr. Lactucarium (ambergris), q. s. to ft.,  $\mathfrak{z}$  ij.

Teaspoonful every three hours for one day, and three times a day, after meals, for from three to six weeks.—*Editor N. E. Med. Monthly.*

THE SURGICAL TREATMENT OF PERITONITIS.—A simple incision of the abdomen to let out purulent and other foreign matter from the peritoneal cavity during peritonitis, is a safe procedure. Not only is it safe, but it is most often the patient's only hope of recovery. So safe is this measure, that in all cases of doubt as to the cause of peritonitis, and where it is evidently very acute and most probably purulent, it is the duty of the attendant to perform laparotomy for the purpose of positive diagnosis, and, if necessary, cleansing and subsequent drainage. The principal danger attending the opening of the abdomen is in the shock produced by contact of the viscera with the air and a lower tempera-

ture. This is overcome best by rapid work in a well heated room. Otherwise there is no reason why the opening of this cavity should be more dangerous than the usual operations for disease of the pleuræ. Another decade will demonstrate such to be a fact. Cleanliness of the most perfect kind is here more necessary than elsewhere, because of the sensitiveness of the exposed parts and the difficulty in extracting small foreign bodies from among the many intestinal folds and other viscera.

THE METRIC SYSTEM. — Prof. Oscar Oldberg, who has been noted as the most vigorous champion of the metric system of weights and measures, and to whose efforts the adoption of the system in the U. S. Pharmacopœa of 1880 was in great part due, has recently published an article recanting what he had previously said in favor of this system, and expatiating upon the superiority of the system now in vogue in America, the latter being quite as simple, universally understood, and much less liable to lead to mistakes in filling prescriptions. The latter point is the chief argument against the adoption of the metric system, the simple displacement of a dot being sufficient to cause a death when dangerous remedies are prescribed. The present system is one almost universally satisfactory, and Prof. Oldberg manifests his good judgment in abandoning his former position and coming forth as the exponent of the present system of prescription writing.

THE CHANCRE.—Prof. H. Zeissl says that “the size and induration has no prognostic importance (*Polyclinic*) in regard to the benign or malignant nature of syphilis. Small and recent indurations, however, yield, generally, more easily to treatment than those which are large and chronic. The absorption of the induration begins at the center and is explained by the injured tissue having less power of resistance, it becomes less hard, and after the disappearance of the sclerosis leaves a red-brown pigmentation, which corresponds in size to the induration. The pigmentation gradually fades away, and the part originally affected becomes whiter than the surrounding healthy skin. Often, however, even this superficial scar is not formed, and we have a gradual fading of the pigmentation into the color of the normal tissues, no remains being left to show the original site of the chancre. The concluding result is one which we would especially commend to the consideration of our readers. It

is that "the excision of the induration does not stop the development of the secondary phenomena; frequently, as previously noticed by Delpech, the induration is reproduced at the seat of incision."

**ANTIPYRIN AS A STYPTIC.**—Dr. J. McCauslane, *Medical Age*:—Mrs. M., a middle-aged lady, had a posterior molar tooth extracted from left supra maxilla at 9 A.M., on the 18th inst. The operation was followed by a troublesome hemorrhage which her dentist with the styptics at his command failed to control, and for which she consulted me thirty-six hours after, claiming she had lost "half a gallon of blood." On examination I discovered the blood welling up from the bottom of the cavity in two fine but continuous streams. I applied the solid stick of arg. nit. (after a failure to control the bleeding by packing with styptic cotton) and sent her home, thinking all secure. Half an hour later she came back, bleeding as freely as ever. Now, thought I, is a good opportunity to test the styptic. I filled the cavity with cotton first dipped in water then rolled in powdered antipyrin, and not another drop of blood escaped. The effect was instantaneous.

**AN INHALATION FOR CORYZA.**—Hager ("Union méd.") recommends the following formula:

Pure carbolic acid, . . . . .	150 grains.
Ammonia water, . . . . .	3 drachms.
Alcohol, . . . . .	1 ounce.
Distilled water, . . . . .	5 drachms.

A piece of cotton saturated with this mixture is placed in a wide-mouthed bottle, and the vapor is inhaled.

**HYDROFLUORATE OF QUININE.**—According to Weddel (*Ibid.*), this salt is soluble in water and in alcohol. He has used it in the treatment of hepatic engorgements of malarial origin, in which, he thinks, fluorine and the fluorides have a beneficial action. He has observed the same in rickets and other nutritive diseases of the bone.

**ANISIC ACID AS AN ANTIPYRETIC.**—This substance (*Ibid.*), obtained by the oxidation of oil of anise, takes the form of colorless prismatic crystals, soluble in alcohol and in ether. It has antiseptic properties, also an antipyretic action analogous to that of salicylic acid. It should be used with caution, as large doses injected into the veins of various animals have caused epileptoid convulsions.



## Book Notices

A SYSTEM OF PRACTICAL MEDICINE. By American Authors. Edited by William Pepper, M.D., LL.D., Provost and Professor of the Theory and Practice of Medicine and of Clinical Medicine in the University of Pennsylvania. Assisted by Louis Starr, M.D., Clinical Professor of Diseases of Children in the Hospital of the University of Pennsylvania. Volume IV. Diseases of the Genito-Urinary and Cutaneous Systems—Medical Ophthalmology and Otology. 8vo. Pp. 877. Philadelphia: Lea Brothers & Co. Cincinnati: H. Stacy.

Four of the five volumes of which this work is to consist have now been issued. The fifth and last one, we understand, will be ready in June. Although we have described the scope of the work pretty fully in our previous notices of it, yet, for the benefit of new subscribers and to refresh the memories of old ones, we will repeat some of the features of it.

This great work is not the production of one person, but has been written by a large number of the most eminent medical men in this country. It has been very correctly stated in regard to it, that in it American medicine will be for the first time represented by its worthiest teachers, and presented in the full development of the practical utility which is its pre-eminent characteristic. The most able men—from the East and the West, from the North and from the South, from all the prominent centers of education, and from all the hospitals which afford special opportunities for study and practice—have united in generous rivalry to bring together this vast aggregate of specialized experience.

Dr. Wm. Pepper is the editor of the whole work, managing its preparation from the inception. On him it has devolved to apportion the subjects so that each author should have assigned to him such as his study and practice peculiarly fitted him to treat, and in which, consequently, his views will be accepted as the latest expression of scientific and practical knowledge. So wide is the scope of the work that, with the exception of midwifery and matters strictly surgical, it embraces the whole domain of medicine, including diseases of women and children, of the genito-urinary organs, of the skin, of the nerves, hygiene and sanitary science and medical ophthalmology and otology.

We consider it one of the grandest works of Practical Medicine in the English language. It is a work of which the profession of this country can be proud. Written exclusively by American physicians who are acquainted with all the varieties of climate in the United States, the character of the soil, the manners and customs of the people, etc., it is peculiarly adapted to the wants of American practitioners of medicine, and it seems to us that every one of them would desire to have it. It has been truly called a *Complete Library of Practical Medicine*, and the general practitioner will require little else in his round of professional duties.

The whole work will contain about 5,500 large octavo pages, equal to about 15 ordinary octavo volumes. It is sold by subscription only. The price per volume, in cloth, is \$5.00; leather, \$6.00; half Russia, raised bands and open back, \$7.00.

---

THE PRINCIPLES AND PRACTICE OF MEDICINE. By the Late Charles Hilton Fagge, M.D., F.R.C.P., Physician to and Lecturer on Pathology at Guy's Hospital; Examiner in Medicine in the University of London, etc. Including a Section on Cutaneous Diseases, by P. H. Pye-Smith, M.D., F.R.C.S., Lecturer on Medicine at Guy's Hospital.

Chapters on Cardiac Diseases, by Samuel Wilkes, M.D., F.R.S., Physician to Guy's Hospital and to the Royal Hospital for Children, London.

And Complete Indexes, by Robert Edmund Carrington, M.D., Assistant Physician to Guy's Hospital. Volume I. 8vo. Pp. 1040. Philadelphia: P. Blakiston, Son & Co. Cincinnati: R. Clarke & Co.

This is a most complete and exhaustive work and well worthy of its distinguished author, who bestowed upon it his best energies for more than twelve years.

This work is the most philosophical and scientific Practice of Medicine with which we are acquainted. In making this statement we do not wish it to be understood that it is not also practical, and may not be consulted advantageously for serviceable hints in practice. We mean that to a far greater extent than any other of its class it sets forth the principles of medicine, exhibiting to students and practitioners the reasons for the administration of certain remedies for particular diseases or morbid phenomena. It has seemed to

us that, during the last five or ten years, there has been a tendency in medicine to lose sight of principles and place undue importance upon what is regarded as *practical*. The result, of course, is to make the practice of medicine more and more a mere empirical art, stripping it of its scientific character. Our author begins with defining disease, and then discusses pathological anatomy and clinical characters as bases of nosology. Then follows a treatment of symptoms of diseases, physical signs and subjective symptoms, general etiology, prognosis, modes of dying—by paralysis of respiration—by asphyxia, etc. Under the heading of General Morbid Processes there are considered contagion, fever, inflammation, tubercle, etc. There is plainly evident, on the part of the writer, an effort to impress upon the mind of the student such facts or principles pertaining to health and disease that, when called upon to treat an affection, his knowledge of natural and morbid processes and their relations to each other will enable him to form a process of reasoning, which will result in disclosing the mode of treatment to be pursued in the case.

But it should not be supposed that the work is but little of a practical character. On the contrary, it is quite so. The author's very great experience, obtained from a large private practice, and from being, for a long time, physician to Guy's Hospital, has enabled him to very fully illustrate the treatment proposed for each disease by the report of very interesting cases that had come under his observation.

We have not met with a work for a long time upon the practice of medicine having so much the character of an original work as this one—exhibiting so little evidence of being a compilation. The author very frequently refers to other writers, but it is generally more for the purpose of confirming the correctness of his views, by adding testimony, than to procure material which he did not already possess.

---

MATERIA MEDICA AND THERAPEUTICS, FOR PHYSICIANS AND STUDENTS. By John B. Biddle, M.D., late Professor of Materia Medica and General Therapeutics in the Jefferson Medical College, Philadelphia. Tenth Edition. Revised and Enlarged. With Special Reference to Therapeutics and to the Physiological Action of Medicines. By Clement Biddle, M. D., U. S. N., and Henry Morris, M.D., Fellow of the College of Physicians, of Philadelphia; Demonstrator of Obstetrics and

Gynecology in Jefferson Medical College, etc. With Numerous Illustrations. 8vo. Pp. 524. Philadelphia: P. Blakiston, Son & Co. Cincinnati: R. Clarke & Co. Price, cloth, \$4.00; leather, \$4.75.

There have been ten editions of this work issued. Surely this is evidence incontrovertible that it has met with great favor with the profession. A writer or publisher of a medical work that has reached a fifth or sixth edition considers it to be a matter of great congratulation, and that it speaks in high terms of its success. How very successful, then, has been a work of which nine editions have been exhausted, and appears before the profession in a tenth edition.

A very prominent advantage of the book, and probably its most popular feature, is its small size and practical character; realizing this, and knowing the value of a concise and practical book to the student, endeavor has been made to decrease rather than increase the number of pages; so, though a large amount of new matter has been added, space has been made for it by striking out that which was obsolete or useless. The classification of medicines was rearranged for the ninth edition, so, beyond the transposing of certain articles, this feature remains the same. Another important alteration made in the ninth revision, that of considering the action of medicines on the physiological instead of the empirical plan, also remains, but has been extended so that the physiological action of each drug upon the human economy is clearly and concisely set forth. Therapeutics—the practical application of remedies—has been given more prominence than ever before, and will compare favorably with other textbooks.

The most important additions to this edition are Paraldehyd, Ethyl Bromide, Rapid Anesthesia, Cocaine, Preparations of Manganese, Lactic Acid, Nitroglycerin and the Nitrites, Poultices, Lycopodium, etc. More prominence is also given to mercurial inunction, fumigation and hypodermic injection in the treatment of syphilis, and numerous formulæ are given for the preparation of the solutions recommended by Lewin, Bamberger, Martineau and others—strong advocates of the latter method.

---

THE YEAR-BOOK OF TREATMENT FOR 1885. A Critical Review for Practitioners of Medicine and Surgery. Contributors, J. Mitchell Bruce, M.D, T. Lauder



Brunton, M.D., F.R.S., Thos. Bryant, F.R.C.S., F. H. Champneys, M.D., Alfred Cooper, F.R.C.S., Sidney Coupland, M.D., Sidney P. Phillips, M.D., F. Douglas Powell, M.D., Henry Power, M.B., F.R.C.S., U. E. Sansom, M.D., and some thirteen other distinguished Physicians and Surgeons. 12mo. Pp. 316. Philadelphia: Lea Brothers & Co. Cincinnati: R. Clarke & Co.

Our readers probably will remember seeing our notice of the Year-Book for 1884. A volume appears each year; the object being to present to the practitioner not only a complete account of all the more important advances made in the treatment of disease, but to furnish also a review of the same by competent authorities.

The work is divided into different departments; for instance: Diseases of the Stomach, Intestines, Liver; Diseases of the Kidneys, Diabetes, etc. Following each heading are abbreviated selections from the various medical journals of the world, the different articles treating the subjects or diseases to which the department is devoted in which they appear.

The medical literature of all countries has been placed under contribution, and the work deals with all the more important matters relating to Treatment that have been published during the year ending September 30, 1885.

The work will be found exceedingly useful indeed; for although quite small, yet it outlines in a very satisfactory manner the most approved treatment of each disease during 1885—that is, what was regarded during that year as the most approved treatment. By procuring and filing away the back issues of the Year-Book, and adding to the file future publications of it, the best possible method will be afforded to study the progress of medicine from year to year.

---

ELEGANT TONIC.—An elegant tonic is: Tr. ferri chlor., 1 ounce; glycerini,  $\frac{1}{2}$  ounce; liq. ammon. acet.,  $2\frac{1}{2}$  ounces. M. Teaspoonful before meals. — (Dr. A. F. Wright.)

This makes a beautiful cherry-red mixture, not at all bad tasting. The liq. ammon. acet. must be fresh and strictly neutral, because if there be an excess of ammon. carb. there will be a sudden and disagreeable bubbling over, and a precipitation of the iron as a carbonate.—*Indiana Pharm.*

## Editorial.

---

TO SUBSCRIBERS.—Although our terms of subscription are in advance, and we so announce the fact, yet we regret to find that not a few of our subscribers have gotten the impression that it makes no difference when they remit, if they remit some time. In fact, some, who used to pay promptly, seem to think now that it is not important if they do not pay at all. We have wished to be accommodating, and have been disinclined to oppress any one, but, nevertheless, we expect payment, and expect it in advance. We do not propose to suspend any rule except to accommodate the needy. We hope those who have not paid their subscription for the present year, and do not need accommodation, will forward without further delay.

---

AMERICAN MEDICAL ASSOCIATION.—We really hope that the physicians of the West will use every effort to be in attendance upon the coming meeting of the *American Medical Association* at St. Louis. As stated by an exchange, the efforts of members of the profession in some of the Eastern cities to monopolize all of the distinguished positions in the INTERNATIONAL MEDICAL CONGRESS, when it holds its meeting in Washington, and their insults of Western medical men should meet with such rebukes as they merit. It has been very correctly said that their course has been such as to bring the blush of shame upon every American physician who holds the honor and dignity of the profession at heart. The ass by his coarse and loud braying causes every one near him to place his fingers in his ears to shut out the horrid noise, and yet, no doubt, his assship regards his braying most melodious music. And thus fools belonging to the human race, consider that they themselves are the embodiments of all learning and wisdom, and go about tooting their horns in praise of themselves, making themselves nuisances by their noise. Since the meeting of the *American Medical Association* in New Orleans, how shamelessly and persistently have the professions of those cities claimed that all the medical talent of the United States is contained in Boston, Philadelphia and New York!

We hope, in fact, we have but little doubt, that the meeting at St. Louis will be composed largely of Western phy-

sicians; and we believe that they will not forget how they have been insulted by their Eastern brethren, who gave all the appointments of the original committee to men from Philadelphia, New York and Boston, on the plea that only the members of the profession of this country *who reside in those cities are known in Europe*—they only possessing sufficient talent and learning to carry their names across the Atlantic. Some of our readers may think that we are exaggerating, not supposing that there could be men, members of a learned profession, of such brazen vanity and impudence as we describe, but we will assure them that we do not exaggerate in the least. Just such pretensions as we set forth have again and again appeared in Eastern medical journals by parties who have been trying to capture the Association.

“When these men,” says the *New England Medical Monthly*, “these disruptionists, these men who, from the first moment of their appointment on the committee of nine, down to date, seem to have lost all sense of justice and the instincts which ordinarily control gentlemen; when, we say, they come back, *it must be on the basis now existing*, viz.: under the arrangements made by the enlarged committee, *and no other*.”

---

RAILROAD ACCOMMODATIONS TO THE AMERICAN MEDICAL ASSOCIATION.—Just as we were going to press with the MEDICAL NEWS we received a communication from Mr. John Egan, General Passenger Agent of the *Cincinnati, Indianapolis, St. Louis & Chicago R. R.* (known as the Big Four) in which he states that reduction has been made to those who will attend the *American Medical Association*, which meets at St. Louis from May 4th to 8th, on the “concession plan,” viz.: passengers will pay full fare going, and be returned at one-third fare on presentation of the certificate, which must bear indorsement of the ticket agent at starting point, that full fare was paid going; and certificate of Secretary of the Association that the party was in attendance at the meeting.

The C., I., St. L. & C. Railway (Big Four) will offer special accommodations to all passengers going over their road from Cincinnati to St. Louis. They will run Pullman Combined Sleeping and Drawing Room Cars through *without change*. These cars accommodate three classes—Sleep-

ing Car, Parlor Car, and Reclining Chair Car passengers. They are equipped with elegant buffets, electric bells, and all other modern improvements. It should be borne in mind that this road is the *only* line running Pullman Combined Sleeping and Drawing Room Cars from Cincinnati to St. Louis. In consequence of this fact, we have no doubt delegates will prefer this road to any other; for with other roads, Pullman cars, as is the case on this road, are not put on for the exclusive accommodation of passengers from Cincinnati to St. Louis, but, coming through from the East, a passenger starting from Cincinnati has no choice of location in the car, but must take such berths as have not been assigned to through passengers from the East, they having first choice.

Pullman Combined Sleeping and Drawing Room Cars will run on trains which leave Cincinnati daily at 6:55 P.M. (Standard Time), arriving at St. Louis at 7 A.M. Returning will leave St. Louis at 7:30 P.M. daily, arriving at Cincinnati at 7:35 A.M.

---

BACILLUS AND CONSUMPTION.—Dr. Beverly Johnson, in a clinical lecture recently, said that only a few months ago the chorus of the supporters of Koch was somewhat after this fashion:

“What is consumption? The bacillus.

“What is the bacillus? Consumption.

“But what causes consumption? Why, the bacillus.

“But what causes the bacillus? Consumption.”

“And now I ask, in the words of Prof. Loomis, whether they (these microbes) are the cause or the scavengers of disease?”

By the way, Prof. Johnson believes in the utility of intrapulmonary injections in pulmonary phthisis. He says that they certainly allay cough, diminish the quantity and change the character of the sputa, and in some remarkable manner, have at times manifest power in lessening the distressing symptom *dyspnea*.

The point, he says, of a fine canulated needle should be inserted in the first, second, or third intercostal spaces, anteriorly, or in the axillary region. While there is no risk in making injections upon or outside of a vertical line passing through the nipple on either side, there is danger in injecting at any measurable distance within this line, lest we pene-



trate the pericardium or one of the great thoracic vessels. The needle should be inserted from two and a half to three inches. He usually makes use of iodine in his injections, employing a solution of the compound tincture, of the strength of one part to four parts of distilled water. From ten to twenty minims may be injected upon each occasion, and the injection may be advantageously repeated in four or five days. Previous to the introduction of the needle of the Pravoz syringe, the patient fully expands his lungs, and retains the air in them during the few moments it takes to make the injection.

It is known that the needle has penetrated a cavity where there is no feeling of resistance from the point of it, when there are slight movements, in different directions, made of the body of the syringe. He says that no harm follows upon making an injection into the solidified tissue in the neighborhood of a cavity. In fact, he is more and more convinced that the best indication for these injections is in cases where the apices are *solidified* and not *softened*.

The objects of the injections are, mainly, to disinfect the sputa and to modify the walls of the cavity, so that it will, little by little, tend to close up and cicatrize; and, in producing these results, we shall also expect the amount and character of the secretions from the lung cavity to be sensibly changed for the better. When we inject solidified lung tissue, we expect, if there is an underlying inflammatory cause, as he believes there is, we shall modify this inflammatory exudation considerably. We shall probably produce such changes in it as to render it fluid and easier of resolution or expectoration.

---

DECEASE OF DR. AUSTIN FLINT, SR.—There is not a physician of this country who will not learn with sorrow of the decease of the most distinguished physician, Prof. Austin Flint, Sr. As the *Journal of the American Medical Association* well states, "Of the many distinguished physicians of America, distinguished both as original thinkers and clinicians, none have risen to a higher place in the esteem and respect of the professional men of their country, and indeed of medical men the world over, than AUSTIN FLINT." There is scarcely a village, or hamlet, or neighborhood, throughout this country, where his Practice of Medicine or some one of his other works may not be found upon the

book-shelves of a physician. The names of Flint and Gross were more generally familiar with medical men of this country than those of any other physicians having an extended reputation.

While Dr. Flint was not a voluminous writer, as has been the case with not a few medical men of this country, yet his contributions to medical literature were considerable, and it was a characteristic of his writings that they were valuable. His productions bore evidence that he was an accurate observer and deep thinker. There was to be found in none of them, a mere rehash of what some one else had written, but they were marked by originality. His *Practice of Medicine* constitutes an epitome of his own researches and experience, and when he quotes from others, it is for the purpose of proving the correctness of his views.

Dr. Flint died suddenly of apoplexy in New York City on Saturday, March 13th. He was born in Massachusetts, October 20, 1812, and was consequently in the 74th year of his age. It is stated that his ancestors came to this country, settling in Concord, Mass., in 1638. We have learned that his grandfather, who was a physician, died no further back than 1850, in Leicester, Mass., having passed the age of 90. Dr. Flint, after having studied at Amherst and Cambridge for three years, entered the Medical Department at Harvard College as a medical student, and graduated from it in 1833. It will thus be seen that at the time of his decease he had been a practitioner of medicine over 52 years. He was practicing medicine in Buffalo in 1836. We have not heard where he was located from the time he graduated until he settled at Buffalo. In 1844 he was appointed to the chair of the Institutes and Practice of Medicine in the Rush Medical College of Chicago, which he resigned at the end of the year. Beginning with 1846, he edited for ten years the *Buffalo Medical Journal*. While residing in Buffalo he made an examination of the *modus operandi* of the production of the "knockings" of the Fox sisters, who were the originators of modern Spiritualism, and published an expose of that humbug. In 1847 he assisted in founding the Buffalo Medical College, in which, until 1852, he was Professor of the Principles and Practice of Medicine and of Clinical Medicine. In 1852 he held the same chair in the University of Louisville, where he remained until 1856, when he returned to the Buffalo College as Professor of Pathology and Clinical Medicine. From 1858 to 1861 he

was Professor of Clinical Medicine in the Medical School of New Orleans during the winters, having, in the meantime (in 1859), removed from Buffalo to New York City, where he passed the remainder of his life. In 1861 he was appointed Professor of the Principles and Practice of Medicine and of Clinical Medicine in the Bellevue Hospital Medical College. He has been President of the American Medical Association, and was to have been President of the International Medical Association.

The esteem in which he was held abroad may be known by the fact that he was selected to deliver the address in medicine at the next meeting of the British Medical Association, and it was his intention to visit Europe the coming summer for that purpose.

---

CASE OF QUINTUPLE LABOR.—In the *Meditz Obozrenie*, Dr. F. Poliakoff describes a rare of quintuple labor, which has lately taken place in the village Sarai, Sapojok District, Riazan Government. The patient, a peasant woman, aged 27, who had been married nine years and delivered six times (at full term, and each time of a single foetus), came to the Sapajok Zemsky Hospital in the beginning of February (about five months after the last catamenia) on account of enormous enlargement of her abdomen, which caused extreme difficulty in breathing and general weakness. On examination feeble fetal cardiac sounds were heard in the right hypochondrium. In view of the enormous size of the womb, plural pregnancy was suspected. On February 28th, in the evening, uterine contractions began; and on March 1st, at 8 o'clock A. M., labor ensued. The patient was delivered of five female foetuses; which followed one another at intervals of a few minutes, two of them being in pelvic, three in head, presentations. Each of them was inclosed in a separate sac (unruptured amnion). The first foetus (a monster) was dead; the remaining four were alive, but died soon after rupturing their sacs. The placenta, which was single, and weighed 585 grammes, was squeezed out after Crede's method. There were five amnia and a single charion, common to all; the umbilical cords were attached along the margin of the placenta. Four of the foetuses were normally developed, their individual weight being about 590 grammes, and their size varying from 29 to 31 centimetres. The fifth, measured 41 centimetres in length, weighed 934

grammes, and presented considerable anomalies (elephant-asislike swelling of the integuments of the head, microcephalia, defective numbers of fingers and toes, etc.). The umbilical cord of the monster contained only two vessels (one artery and one vein), while the cords of the remaining four fœtuses consisted of three vessels.

---

THE AMERICAN SOCIETY OF MICROSCOPISTS.—Dr. George E. Fell, of Buffalo, N. Y., has placed us under obligations to himself for a copy of the Proceedings of the American Society of Microscopists, which met in Cleveland, O., August 18, 19, 20, 21, 1885. The volume, bound in paper, contains 258 octavo pages. Dr. Fell seems to serve the Society, as Secretary, in a highly satisfactory manner, for he has filled the office for a number of years.

The volume contains papers read by Hamilton L. Smith, LL.D., of Geneva, N. Y.; Ex-Gov. Jacob D. Cox, of Cincinnati, O.; H. Kellicott, Ph. D., of Buffalo, N. Y.; H. J. Detmers, M.V. D., Columbus, O.; Louis M. Eastman, M.D., Baltimore; W. T. Manton, M.D., Detroit; Lester Curtis, M.D., Chicago; Ernst Gundlach, Esq., Rochester, N. Y., and some twenty other gentlemen.

We would be quite pleased to give an outline of some of the papers, but we can not at the present time. We hope to do so at some other time. Mr. Ernst Gundlach's paper upon "Immersion Objectives" is quite interesting. Mr. G., as our readers know, is a practical optician, who makes objectives unsurpassed by any made in the world for exquisite definition and wonderful resolving powers.

---

CAUSES OF DISEASES.—Dr. Fagge, in his *Principles and Practice of Medicine*, which we notice on another page, says that our knowledge of the *causes* of diseases, or of their *etiology*, is exceedingly imperfect. It may be doubted whether any cause is to be found which invariably and under all circumstances produces a given effect. But, in many instances, there is little difficulty in perceiving that an illness, of whatever kind, has been preceded by some definite change in the outward circumstances of the patient, or in the action of some vital organ. He may have been chilled by exposure to cold, he may have eaten unwholesome food, he may have been overexcited or overfatigued. Either of these conditions is then called the "*exciting cause*"



of the disease. But, on further consideration, it appears that people often endure weather no less inclement, indulge their appetites in precisely similar ways, have their mental and bodily powers strained to quite as great an extent, without being attacked by the same complaint, and, indeed, without their health being in any degree impaired. We have no alternative but to assume that some other cause or causes has been in operation. This may act in either of two ways; it may combine with the exciting cause to produce the disease in the individual who falls ill, or its influence may be exerted upon those who remain well, counteracting and multiplying the operation of the exciting cause. If, for example, it is found that a complaint occurs only in persons at a certain time of life, this may either depend upon that particular age being favorable to its development, or upon other ages being unfavorable. Probably it sometimes happens that the one explanation is correct, sometimes that the other is; or both may apply in the same case. But in practice we generally assume that all causes of this kind have a positive instead of a negative action; and we are, therefore, accustomed to group them together under the name of "*predisposing causes*."

---

FOUNTAIN PENS.—For a couple of years we have done all of our writing with a fountain pen; and we have become so accustomed to it, that it would be a trial to us to return to the use of a pen requiring to be dipped into an inkstand every few minutes to be replenished with ink. It is astonishing to us that every person who has considerable writing to do, does not supply himself with a fountain pen; for with one, as he can always have it about him, he can write with pen and ink wherever he may be. Sitting at one's desk in one's own office, the employment of a fountain pen is much more convenient than an ordinary pen. The one we have will write many pages before it requires to be refilled.

But in procuring a fountain pen great care must be employed in making a selection, for there are many offered for sale that are frauds. The only one we have found to be perfectly satisfactory, and that will always write, is called the "YALE PEN." The price of the Yale, with a good gold pen worth \$2, is \$3; without the gold pen, the price is \$1. After using one for a while, a person could not be induced to do without it.

# THE CINCINNATI MEDICAL NEWS.

VOL. XIX. No. 220.  
Old Series.

APRIL, 1886.

VOL. XV. No. 4.  
New Series.

## Original Contributions.

### Facial Paralysis.

A CLINICAL LECTURE BY PHILIP ZENNER, A.M., M.D.,

Lecturer on Diseases of the Nervous System in the Medical College of Ohio.

GENTLEMEN:—The little boy before us is brought here for the treatment of a facial paralysis, which his mother observed a few days ago.

If you look at him as he now appears you will not observe anything abnormal. Both sides of the face are quite smooth, as you would expect to find them in a boy of six years. But when he tries to close his eyes, you observe only the right eye is closed, while the left remains wide open. When he smiles, or attempts to show his teeth, only the right side of the face moves, the left remaining expressionless and without motion. There is in this boy paralysis of all the muscles supplied by the left seventh or facial nerve; that is facial paralysis, or, what is often termed, Bell's paralysis.

The appearance would be somewhat different if the boy were older. Even when the face was quiet a difference in the two sides would be noticeable. The paralyzed side would be smooth and expressionless, the whole side seem to hang lower, the upper lip be less arched, the naso-labial fold less marked than on the healthy side. There would also be a greater difference while muscles are in action; the face would be drawn further to the healthy side, and, it would be observed, the brow could not be furrowed on the paralyzed side.

In some old cases of facial paralysis the appearance is quite in contrast with that just described. Often, in pro-

tracted cases, at the end of three or four months a state of contracture takes place in the paralyzed muscles, and instead of being smoother, the furrows in the paralyzed side become deeper than in the other. The angle of the mouth is drawn upward, the naso-labial fold becomes deeper than it was normally, and the cheeks are pressed against the cheeks.

The greatest source of trouble in old cases is the condition of the eye. On account of the lid not closing, the eye is constantly exposed to foreign particles, and is very much irritated or inflamed. During sleep and when an effort is made to close the eyes, the eyeballs roll upward and either inward or outward, so as to conceal the cornea, but, nevertheless, from the absence of reflex winking and the considerable exposure that remains when the eyeball is rolled upward, there is often considerable irritation of the conjunctiva. The annoyance to the patient is still greater on account of the tears constantly running over the cheek, because the eyelids are not properly pressed against the eyeball, and the tears do not easily enter into the canaliculi. These ocular disturbances are not present in our little patient, as the trouble is too recent, and we have good reason to believe they never will appear in this case.

The first question that occurs to us in examining our case is the nature of the paralysis, whether it be central or peripheral. In many cases of lesion of the brain, from hemorrhage, embolism, etc., we find facial paralysis in connection with other paralyses, usually as part of a hemiplegia, or paralysis of one side of the body. Does our case belong to this category? or is it due to direct damage of the trunk of the seventh nerve, what is known as peripheral paralysis? The most superficial examination will enable us to decide that this is a peripheral paralysis. In almost all cases of facial paralysis from disease of a hemisphere of the brain the paralysis is only partial; only the lower branches of the seventh nerve are affected, while the upper branches almost entirely escape. We therefore find that the angle of the mouth droops, that the naso-labial fold is less distinct, and in laughing, crying, etc., there is no movement of the cheek and mouth of one side, but the eye can be closed, the forehead can be furrowed, almost or quite as well as on the other side. So, in this case, where all the muscles supplied by one seventh nerve are paralyzed, we know that the paralysis is not central.

There is just one instance in which a lesion in the brain

substance may produce a facial paralysis similar to what we have in this case, that is when the lesion is in the pons varolii. In such cases, which occur only rarely, we may have what is termed alternate hemiplegia, or paralysis of the leg and arm on one side and of the face on the other. In this case the facial paralysis may be just like the ordinary peripheral paralysis, because the nucleus of the seventh nerve is in the pons varolii, and the lesion may destroy that nucleus and also fibres of the nerve trunk.

Peripheral paralysis of the seventh nerve, such as we find here, is the most common of all peripheral paralyses. This is because the nerve at the base of the skull, in the long bony canal in the temporal bone, and in the face after its exit from the stylo-mastoid foramen, is so liable to accidents. Disease or injury in any part of this tract may produce paralysis, but its most common causes are suppurative otitis media, with secondary destructive changes in the temporal bone, and exposure.

A careful examination of symptoms will sometimes enable us to diagnose the exact seat of the lesion. Within the cranial cavity the seventh nerve lies beside the auditory, and just after it enters the canal in the temporal bone it gives off branches which supply the soft palate and uvula. If, then, the lesion involve this part of the nerve, the soft palate will be paralyzed on the same side; it will hang lower and will move very little in phonation, and there may be deafness from involvement of the auditory nerve.

The chorda tympani nerve, which supplies the anterior two-thirds of the tongue with the sense of taste, enters into the seventh nerve, and again leaves it during its passage through the temporal bone. So that loss of the sense of taste on the same side of the tongue as the facial paralysis would indicate a lesion at a certain part of the bony canal.

Lesions involving the nerve outside the stylo-mastoid foramen would produce only paralysis of facial muscles.

In our little patient we have what is termed rheumatic paralysis, a paralysis due to exposure, perhaps some inflammation of the sheath of the nerve, and slight exudation compressing the nerve fibres. The seat of the disease is somewhere anterior to the place where the chorda tympani nerve is given off, as there is neither impairment of the sense of taste or paralysis of the soft palate. The paralysis came on suddenly, the usual history in such cases. It was observed in the morning when the child got up.



The prognosis varies greatly according to the cause of the disease. When there is some pressure on the nerve that can not be removed, a bony tumor, etc., the paralysis is incurable. A paralysis from simple section of the nerve usually gets well in four or six months. Rheumatic paralysis usually recovers, but the duration of the disease varies greatly. Of great value in the prognosis of such cases is the condition of the electrical reactions. In many cases of peripheral paralysis there is a great change in the electrical reactions; there is obtained what has been termed the reaction of degeneration. No muscular contraction whatever can be obtained when the electrical current, either faradic or galvanic, is applied to the nerves, and no contraction is produced when the faradic current is applied directly over the muscle. On the other hand, the galvanic current when applied to the muscles will produce contractions even more readily than in health, but according to a different order from the normal.

These changes in electrical reaction occur to a varying extent in different cases. If the paralysis be slight, changes in electrical reactions never occur. If the paralysis be severe, changes in electrical reaction occur very rapidly. So, for practical purposes we may lay down this rule: If at the end of a week the electrical reactions are altogether normal, the paralysis is slight and will disappear in a few weeks. If at the end of that time the reaction of degeneration be well marked, the paralysis is severe and will last many months. If, on the other hand, at the end of a week there be some, but no great, change in the electrical reactions, the case is one of intermediate severity.

You see when we test the reactions in our little patient they are altogether normal, just as we must expect to find them in a case so recent.

In treatment our first object must be, when possible, to remove the cause, as any diseased process secondarily involving the nerve trunk, treatment of syphilis with mercury and iodide of potash, etc.

Cases such as the one before us often get well without any treatment. We usually find most serviceable in such cases, the application of the galvanic current at an early period, the positive pole being applied over the nerve at its exit from the stylo-mastoid process. At a later period the current should be applied directly over the paralyzed muscles.

## Report of Schuylkill County Medical Society.

BY JAMES STRATTON CARPENTER, M.D.

Read before the Pennsylvania State Medical Society.

IT has been my fortune in the past year's practice to meet with not a few cases of more than usual interest; some on account of their exceptional occurrence, and others by reason of their presenting many unusual features of the disease and their successful issue, in spite of most alarming conditions. The first of these, a case of septicæmia following human bite, which I have reported in full in No. 756 of the *New York Medical Record*, possessing especial interest, not only on account of its being the first case of the kind to be recorded, as far as I can ascertain, but, also, as adding valuable testimony to the results obtained by experimentation on the lower animals with human saliva. The patient was bitten on the finger, during a domestic quarrel, by his brother-in-law, a strong, healthy Irishman, who, at the time, was considerably under the influence of liquor. A period of four weeks elapsed after the wound had been cauterized by a physician called in at the time, before I was summoned, during which time necrosis of the finger had occurred and the setting up of septic symptoms had been accomplished. Amputation of the finger at the metacarpophalangeal articulation was the only resort; but even then recovery was only established after a long and doubtful struggle.

Another case was that of a child four years of age, who drank nearly a half pint of pure whisky, and then apprised his mother of the fact by telling her he had "taken some of papa's beer;" and, on looking around, she discovered that half a gobletful of pure *spiritus frumenti* had been taken by the child when the maternal eye had been momentarily averted. Alarmed as to the possible outcome of this venture, she told her husband, who came in soon afterward, of the child's act, but he, probably applying the usual rule in his own case to that of the boy, said, "There is no need of being scared; he will be all right after he has slept it off." Ten hours later I was called to the house by the now thoroughly alarmed father, and found the boy's condition a critical one indeed. He lay on a bench in one corner of the room, with his eyes wide open and staring—the condition of *coma vigil* best describes it—the pupils dilated to

their fullest extent, and entirely insensible to the closest proximity of a strong light; the breathing was rapid and shallow; the face flushed and the head very hot to the touch; the jaws were tightly closed, as though in the muscular rigidity of tetanus; while every few minutes strong twitchings of the arms and legs would occur; and it was the observance of this fact, and the failure of every effort to arouse the child, that led to my being sent for. Auscultation of the chest revealed loud mucous and bubbling râles, which, in connection with other conditions observed, led to the diagnosis of congestion of the lungs and brain, and the following treatment was adopted: A powder, containing half a drop of croton oil and one-fourth of a grain of calomel, was prescribed every hour until the purgative effect was obtained, and grains iv. ammon. carbonat. were given every two hours. While the medicines were being sent for I gave the child a hot mustard foot-bath, and enveloped the chest in strong mustard plasters, while cold applications were constantly made to the head. At my second visit, four hours later, I found the little chap much improved; consciousness had been restored, and with it the child's recovery assured. Two powders had been given and one dose of the mixture, when he attained the condition in which I found him. The third day following this alcoholic spree the child was playing about the house as usual.

In a miserable, cramped dwelling, where the mother of the family was lying in one room in the last stages of laryngeal phthisis, I found, on making my visit one day, the youngest daughter, twelve years old, in a high fever, with the scarlatinous eruption fully developed over the body, and on further examination of the throat, a condition that at once established a grave outlook, and characterized the case as one of malignant scarlatina. Both tonsils were enlarged and inflamed, and covered, as was also the pharynx, with a diphtheritic deposit. The cervical glands were painful and swollen on both sides, extending to the angles of the jaws, and swallowing was difficult, almost impossible. In conjunction with a febrifuge mixture I prescribed—

Rx.	Tr. ferri chlor.,	.	.	f 3 iij	
	Potass. chloratis.,	.	.	3 ss	
	Acid hydrochlor.,	.	.	gtt. xxv	
	Syrupi,	.	.	q.s. f 3 iij.	M. Ft.

Sig. — A teaspoonful every three hours.

This course I pursue in all diphtheria cases, whether occurring as a concomitant of scarlet fever or alone, and I have seen some of the worst cases recover when I could hardly have hoped for it at the outset. The chlorine given off in the mixture seems to be as efficient a germicide as can be desired, and the medicine, in my experience with it, has never failed to be well borne by the patient.

This child, as complications of the scarlatinous attack, had severe diphtheria, suppurative otitis of both ears, acute nephritis with *suppressio urinæ* for thirty-two hours, articular rheumatism, and peritoneal inflammation, but eventually recovered, and, at present writing, has fully regained her strength. Her hearing at one time, and for a period of three weeks, completely lost, is re-established; the treatment for the suppurative otitis having been dry packing of the external meatus with powdered boracic acid, after the employment of hot syringings to cleanse the ears of the discharge. No albuminuria is present, and I have been able to promise to the family a complete recovery, in spite of conditions which, at one time, seemed to forebode quite an opposite state of affairs.

The little brother of this patient was taken with the disease two weeks after his sister's illness began, it having been an utter impossibility to isolate the case when she was seized with this much-dreaded disease of childhood. He had it so lightly that he was playing about the room the whole time, the illness of the mother and the other child preventing much care being exercised over him. Toward the end of the second week, when convalescence had apparently been satisfactorily established, I was sent for, and found him with the following symptoms: a rapid pulse, of high tension, fever, vomiting, and crying with pain in his head and back. With a full knowledge of all the circumstances of this case, the recent attack of scarlatina, and constant exposure to risk of taking cold, and the existing symptoms, I suspected the onset of nephritis; but the next day, noting the increased rapidity of breathing and the incessant cough—conditions which had presented themselves since my last visit—I carefully examined the lungs, and discovered all the signs of *croupous* pneumonia, engorgement of the left lung, and crepitant râles heard over the base posteriorly, with flatness of the whole area on percussion. The regular course of an attack of croupous pneumonia ensued, of an aggravated character, recovery being insured



after a very liberal use of cardiac and respiratory stimulants.

Almost coincident with this case was another of the same disease, occurring in a little girl of four years of age, where the lower lobe of the left lung was involved; but there were no serious features of the disease, and at no time was the issue of the case in doubt. A third case occurred in a boy three years of age, to which I was not called until the fourth day of the attack, when home remedies had failed to relieve; both lungs were involved here, and the number of respirations sixty each minute, this rapidity of breathing being maintained for three days, when the digitalis and carbonate of ammonia, and brandy freely administered, brought him into shallow waters and saved his life.

Typhoid fever has been of rather a troublesome character for this region, and has not been limited to a few sporadic cases, as has usually been its custom with us; but three deaths from this cause, occurring in as many days (and among well-known residents of the town), may be mentioned as showing, in a measure, the fatality of this happily limited outbreak. I treated seven cases, and had one death. In one of these cases, the occurrence of violent, and almost fatal, epistaxis the fourth day of the disease, was followed by an arrest of the fever from that time, although the prostration was so great that active stimulation for several days was necessary to prevent a fatal termination from collapse. Two questions proposed themselves to my mind in reviewing this case: first, was I mistaken in my diagnosis? second, can typhoid fever be aborted? As an answer to the first question, let me bring forward the class of symptoms with which I was confronted on seeing my patient for the first time. There was fever of a continued type, the pulse over 100 per minute, and of a soft, gaseous character; the tongue was dry, and dark brown in color, with a collection of sordes over the gums and teeth; the bowels were not moved more than once daily, but the stools were offensive, and possessing the characteristics of the typhoid disease; there was slight pain on pressure in the right iliac fossa, and gurgling; and, lastly, the presence of a few typhoid spots, which appeared a day or two later, led me to conclude I had a case of enteric fever, and I so announced to the family of the patient. Was I mistaken in doing so? If not, then assuredly was this case of typhoid fever cut short by the profuse epistaxis that occur-

red on the fourth day of the patient's illness. The "old treatment" of bleeding in fevers was never to my mind a safe mode of procedure in febrile diseases of a typhoid character, however efficient it may even yet be asserted to be in pneumonia of sthenic type; but if I had never before so believed, the experience in this case would have been reason sufficient to disabuse my mind of any doubt on this subject. I believe it has been asserted by our medical ancestors that a free use of the lancet in cases of typhoid fever has been able to cut short the disease. I believe them; but I doubt not the attack was cut short in a way decidedly unfavorable to the patient. Nor should I advise any, who, from a reading of this case, might be tempted to try the "old" plan of treatment, to do so with any strong hope of success. My own experience has fully satisfied me of its dangers.

The history of the case that terminated fatally is as follows: February 6th I was called to see James Q., who had been brought to his home from Harrisburg, Pa., where for three weeks previous he had been under treatment for malarial fever. At the time of my visit he was in a high fever, with a profuse and exhausting diarrhœa; the emaciation of the patient was extreme; the abdomen showed several crops of rose-colored spots, and the fatigue of the journey had so prostrated him that it did not seem possible for him to hold out very long. Digitalis, carbonate of ammonia and brandy, alternated with a mixture containing acetate of lead and opium, gradually effected a favorable change in his condition, and for the next ten days he more than held his own. Then an attack of pneumonia set in, involving the left lung; but this he safely passed through, only to meet with a more relentless foe, peritonitis setting in, and proving fatal from perforation of the bowels, just three weeks from the time I made my first visit. The impressions derived from this case were not those favorable to the diagnosis of malarial fever, for which he had been treated for nearly a month before he had been brought to his home in Pottsville; and from his condition when I first saw him, together with the information obtained from the patient himself as to his symptoms during his illness in Harrisburg, I was convinced that for the greater part of the time, at least, he was suffering from true enteric fever, and that I had been treating him through a relapse following thereon. While a resident physician at the Episcopal Hospital, Philadelphia,

I treated over fifty cases of typhoid fever in a period of three months' service in the medical wards of that institution; and from my experience there, as in subsequent cases treated in private practice, can testify to the good results obtained from the quinine and acid treatment, which has long been the routine treatment pursued in this disease at the hospital named, and which I see no reason for relinquishment in private practice. A very rare complication of typhoid fever it was my fortune to meet with in several cases treated in the hospital, and in one of the seven cases recently met with, viz.: articular rheumatism; and in this connection I may refer to a paper contributed to a past number of the *Polyclinic* by Dr. F. P. Henry, Philadelphia, in which he speaks of the rarity of this complication and of the success which attended its treatment with salicylic acid.

I am convinced that the majority of fatal terminations in typhoid fever are caused by perforation of the bowels; that, when hemorrhage occurs from the bowels, it does not necessarily portend an unfavorable event—only one of these cases that occurred during my hospital term resulting fatally, and that was a patient who had been a "walking-case" up to the date of his admission into the ward, and his death occurred the second day after I admitted him, from this cause. The necessity, therefore, of *absolute* rest in bed during the continuance of the fever, and for as long a time subsequently as may seem advisable from the character of the attack; the maintenance of *liquid* diet in the strictest sense of the word, nothing but milk and broth being allowed for the entire three weeks, and only a gradual return to solid food being permitted; these are the important features in the treatment of typhoid fever. On no account, whatever, should the patient be allowed to raise himself or herself in bed, the "bed-pan" being employed whenever it becomes necessary to have the bowels moved or the bladder emptied. Relapses are too frequently brought on by carelessness in the matter of the patient's diet in the approach to convalescence, and many a death may be ascribed to the too sudden change from a restricted diet to one of a more substantial character, and more in accord with the patient's own desires. Medicinal treatment I consider secondary to efficient nursing; but as a tonic and astringent remedy, consider quinine and hydrochloric acid all that is necessary.

During the winter and spring of 1883-84, while smallpox was creating such ravages in some of the larger towns of

the county, Pottsville enjoyed an immunity from the disease that certainly was surprising, when the relations of these boroughs to the county-seat are borne in mind, and it is remembered that, at no time during the prevalence of the epidemic in Ashland, Girardville and Shenandoah, was travel between the places named and Pottsville interrupted.

Early in March, however, a case of variola appeared within the borough limits, the history of which I have thought worth while to relate, not only because it was the solitary case that occurred here, but because of the reference made to it in Dr. McKibben's contribution to this report.

I was called to see the daughter of Thomas L., who, I learned, had been ill the past three days with high fever, pain in the back, headache, vomiting and delirium. I saw her on the fourth day of her illness for the first time, and found her in the eruptive stage of smallpox—the eruption being very extensive, covering the whole body, especially developed over the face, arms and hands. There were three members of the family in the house beside the patient, whom I immediately vaccinated, employing the last of some humanized virus I had for that purpose; and nine days later three very sore arms satisfied me that just that number of new cases of the disease had been prevented. Two sisters of the patient living in Philadelphia, who, hearing of her illness, had arrived the night before the eruption had manifested itself, had returned home by the first train as soon as the nature of the disease had become known, without waiting to be vaccinated, and not having it done on their arrival in Philadelphia. I was not surprised, therefore, when ten days later I heard that the younger of the two girls had been seized with smallpox. She had it lightly and recovered; but her sister, who nursed her in her illness, contracted it and died from the disease. I reported my case at once to the town authorities, and was authorized by them to use every means necessary for the isolation of the disease. The situation of the house was favorable to the accomplishment of this object, being on the very limits of the town, in a sparsely-settled district, and the nearest dwelling being two hundred yards distant. It was a double dwelling-house, and my only fear was that the family who had been living in the other half of the building, and who, in the stage of invasion of the disease, had been in and out of the sick-room, might have conveyed the contagion to



other portions of the town, where they had "stampeded" as soon as they knew they were in such close proximity to the much-feared smallpox. No new cases appeared, however, as the result of their departure. Strict quarantine was established over the infected house, and, in order to make it as complete as possible, I arranged to convey the needed provisions to the family during their enforced imprisonment, bringing them with me in my carriage at the time of my visits; so that, during the entire progress of the case toward recovery, there was virtually no communication held between the town and the quarantined family excepting through the attending physician.

In conjunction with brandy and mist. Bashamei I employed the sulphide of calcium every four hours, and made local applications of the tincture of iodine to the face and hands, with a view to prevent disfiguring effects of the disease upon those parts. At first the patient rebelled, on account of the burning produced, but learning that a faithful continuance of the applications would probably save her good looks, she persevered in them; and, as a result, although the eruption was most extensive over the face, scarcely a trace of it remains there to-day.

The occurrence of several deaths from the hypodermic use of morphia, where it has been employed in proportions recognized as being within the limits of safe medication, has suggested to me to include in this paper some reference to the hypodermic use of *aqua pura* in cases, particularly of a hysterical character, where violent paroxysms of pain must be overcome. In one case I have in mind, after the patient had taken gtt. cxx. of the deodorized tincture of opium in a period of ten hours without relief, a hypodermic use of *aqua pura* effectually relieved her of all her sufferings (?), and procured, as she told me next day, a "sweet sleep of several hours." In another instance, where, from a long-standing uterine disorder, hysteria has long eclipsed her bodily ailments, and attacks of pain ensue which no medicine I have been able to prescribe can subdue—and I have purposely made trial of powerful anodynes—a single use of the hypodermic syringe, charged with its measure of  $H_2O$ , has not only procured instant relief, but effected an immunity from similar attacks for periods of a week and even longer, the patient assuring me that "the pain all drew through the needle."

In still a third case, where I had suspected the existence

of the hysterical element in the trouble, which began with menorrhagia, and was accompanied by agonizing pain in the back, I proved the correctness of my suspicions by a recourse to the hypodermic syringe, omitting the morphia, and with entire relief of the suffering complained of.

I do not pretend to assert that I should employ this means in every case of intense suffering met with in practice where speedy relief is necessary, but where, as an accompaniment to the suffering, you suspect the hysterical element to exist. The use of *aqua pura* hypodermically is not only the best means toward the establishment of what is oftentimes a difficult diagnosis, but also a *safe* method of arresting what may be the equivalent of positive physical pain. In conclusion, and as bearing on this subject, let me quote from a French physician who speaks on "the medicine of the imagination:"

"If a patient has swallowed what he calls fulminating bullets, the medicine we administer is suggestion, though we may give it in the form of a pill. When we inject pure water beneath the skin, we inject suggestion hypodermically. We do not praise this medicine for the imagination except as against a category of well-determined troubles having a psychic origin. Let no one accuse us, therefore, of pretending to kill microbes by moral suasion."

---

### Eucalyptus as a Topical Agent.

---

BY P. T. WILLIAMS, M.D.

---

I HAVE never seen, so far as my recollection serves me, eucalyptus recommended as a topical remedy in any of the medical journals, nor do I remember of ever having heard any of my professional brethren speak of having employed it in that capacity. I was led to use it over the inflamed surface in a case of erysipelas, by being told by an old sailor who, at an early period of his life, had sailed through the southern seas of the Eastern Hemisphere, that he had been treated by a physician in some one of the East India islands for erysipelas by the external application of it.

I have, therefore, to report that in three cases of erysipelas, one affecting the face and right leg, another the face, and another the scrotum, that the itching and burning sensation, and the exudation of the peculiar gummy discharge, were

promptly arrested by the application of the fluid extract of eucalyptus.

In a case of caries of the tibia, with extensive inflammation of the skin, attended with the formation of numerous blebs and small ulcers, the happiest results followed upon the local use of the fluid extract of eucalyptus. In the cases of erysipelas it was applied, by means of a camel's hair brush, every four hours. In the case of disease of the tibia I employed it twice daily. In each of these cases appropriate internal treatment was made use of.

My experience with eucalyptus as a topical agent, of course, is too limited to base much of an estimate in regard to its value, but the seeming beneficial effects following in the few cases I have mentioned, encourages me to believe that it can often be used with advantage locally—that there can be obtained from it all the benefits that are to be had by the employment of the tincture of iodine, solutions of nitrate of silver, salts of iron, etc., and that it can be made use of when these could not be in consequence of some objectionable features attending their application. I purpose using it in other cases that may come under my care, and I hope others may try it, so that if it possesses any claims as a local remedy they may soon become established.

---

## Selections.

---

New York Pathological Society.

---

JOHN A. WYETH, M.D., PRESIDENT, IN THE CHAIR.

---

DR. A. G. GERSTER presented a specimen of periosteal sarcoma of the thigh, removed by amputation from a girl twenty-six years of age, who about three years ago fell down stairs, but was not aware, at that time, that she received any severe injury. From that date, however, she began to notice a slight disturbance of the function of the knee-joint, apparently due to the development of a swelling corresponding to the external condyle of the right thigh. The disturbance of function was not so much from pain as from mechanical difficulty in bending the knee, especially in ascending the stairs. When she presented herself to Dr.

Gerster he found a hard, non-movable tumor occupying the site of the external epicondyle. Puncture with the hypodermic needle was negative, and the tumor gave no parchment-like cracking sensation, but it was noticeable, at one portion in the popliteal space, that it was rather movable. Dr. Fluhrer and the other surgeons regarded it as possibly a group of infiltrated glands. The shaft of the femur corresponding to the internal epicondyle was perfectly intact, and the entire tumor was superimposed upon the cortex of the bone. If it had been a central sarcoma the tumor would have been spindle-shaped. Another interesting feature of the specimen was that the movable mass regarded as lymphatic glands had been demonstrated to be such as was diagnosticated. The new growth was confined strictly to the diaphysis.

Dr. Gerster assumed that it was malignant in character, but he invited Dr. Markoe, who had had a large experience in the observation of the class of tumors known as enchondromata, to see the patient with him, whose opinion, after a complete examination, was rather strongly in favor of the tumor being an enchondroma. He thought they might have to deal with one of those osseous growths with a pedicle and a mushroom-shaped top which could be easily chiseled away and the limb of the patient saved. The puncture, however, made it evident that the tumor had a soft center, and the fact that there was in the inguinal region of the affected side a group of glands somewhat more enlarged than those on the opposite side, with the additional fact that the general condition of the patient had suffered severely, led Dr. Gerster to regard it as undoubtedly sarcomatous, and amputation was at once performed.

Dr. Gerster also presented a specimen of myxo-sarcoma of the testicle, removed from a patient thirty-two years of age. The cause was obscure, as there was no history of traumatism or inflammatory process. The tumor was about the size of his fist.

#### UNDESCENDED TESTICLE—HERNIA—OPERATION—CURE.

Dr. Gerster also presented a specimen removed from a man thirty years of age, who since childhood had noticed only one testicle in his scrotum. When he was about eighteen years of age a hernia appeared, and when an attempt was made to wear a truss, the patient found that the pressure of the instrument caused excruciating pain, where-



upon the truss was removed, and the hernia since that time had developed into large proportions. Gradually during the last four or five years a rather hard body had descended into the inguinal region and vicinity of the external abdominal ring, alongside the hernia, painful on touch, and if he kept on his feet attending to business, the pain would become so severe as to compel him to stop work. Dr. Gerster found on examination that he had to deal with an undescended testicle, and also a hernia in which there was a considerable portion of omentum which could not be replaced completely. Consequently he concluded that the omentum had become attached to the hernial sac by inflammatory process. He advised the patient to submit to a radical operation on the hernia, which was performed in the Mount Sinai Hospital, and, when the sac was exposed, it was found that external to it there was situated a body composed of fatty tissue, resembling a lipoma, containing in most of its parts a rather small proportion of connective tissue elements, except at the upper extremity, which was close to the inguinal canal, where a rather hard mass of tissue was found which appeared to him as possibly sarcomatous in character; but it was found to be composed principally of the remains of an inflammatory process.

The sac was opened, and it was found that it was occupied by a large portion of omentum, which was adherent almost the entire length of the sac in the inguinal canal. It was dissected up without much trouble, deligated in several pieces, cut off, and the stump placed in the abdominal cavity. The sac was transfixed with catgut suture in a way which might be compared to the string of a purse; it was tied, and then cut off, and the stump was placed in the inguinal canal. The pillars of the external ring were brought together with stout catgut, leaving a little slit for the exit of the spermatic cord. The atrophied testicle was removed.

There was no elevation of temperature after the operation, and the entire wound healed by first intention. On the fourteenth day slight hemorrhage occurred when the patient attempted, contrary to orders, to lift a body of some weight. The hemorrhage was due apparently to the severing of the deeper portion of the newly formed cicatrix. A slight sinus remained which required slitting open, but which then healed readily, and the patient was dismissed cured, with the advice to wear a light truss.

Dr. Gerster believed that the radical cure of inguinal hernia was doubtful, but at the same time the operation does some good, as it enables the patient to wear a truss, perhaps in a way which will prevent the return of the hernia. The so-called radical cure by means of injection of astringent solutions, Dr. Gerster thought did not deserve the name of radical cure.—*Med. Record.*

---

### Treatment of Labor Delayed by Obstruction at the Pelvic Brim.

---

DR. SAMUEL SLOAN this concludes a valuable article, in the *Edinburgh Med. Jour.*:

I now add a series of propositions for guidance in cases of labor obstructed at the pelvic brim. I do not offer them as final, but hope they may have a share in helping us to reach the time when the mist surrounding this important subject shall have vanished, and we shall be able to do more than we now can for the safety of both mother and child.

I. That MERE *disproportion between the child's head and the brim of the pelvis* is NEVER a sufficient reason for preferring version to the forceps as an original choice in the combined interests of mother and child.

II. That cases sometimes occur, in which, *for other reasons*, version is to be preferred to the forceps as an original choice, but that if the child be of presumably average size, this operation should not be attempted with a conjugate diameter under  $2\frac{3}{4}$  inches, and, with such a diameter, only if it is a *justo-major* pelvis flattened.

III. That the following are some of the "other reasons" for preferring version to the forceps as an original choice: The occiput to the wrong side of an irregularly contracted pelvis; occipito-posterior position in a generally contracted pelvis, which position can not be rectified manually (or rather bimanually); prolapse of the funis; placenta previa; face presentation; displacement or increase in bulk of the presenting part, as by the partial or complete descent of a hand or foot along with the head; great inclination of the pelvic brim throwing the head on to the pubes instead of permitting it to be over the brim; *great* difficulty in applying the forceps, or a very tight and incomplete locking of the forceps after some difficulty in their application.

IV. That where the forceps for "other reasons" is unsuitable as an original choice, version may be tried, *not simply in the flat, but in the generally contracted pelvis, also*, flexion of the head being no contraindication.

V. That if version is decided on, the breech of the child, where this is at all practicable, should be allowed naturally to dilate the cervix; and that, if one leg must be brought down, the other should be left to increase, with the pelvis of the child, the expansion of the cervix.

VI. That if version is decided on as an original operation, it ought, if possible, to be done by the bipolar method, and as soon as the os is sufficiently dilated to permit of it—the membranes being, if practicable, kept entire after version, but ruptured at once, if this is necessary in order to keep the breech in its new position.

VII. That in cases of doubt, forceps should be preferred to version as an original choice. But should the pelvis be shallow, version has this advantage, that if the body be born, the child can sometimes be made to breathe though the head is at the brim. Craniotomy will also then be less difficult to perform, should this operation be afterward required.

VIII. That in cases in which the forceps has failed there should be some reason for suspecting other causes than disproportion (see Prop. III), before version is attempted as an alternative to craniotomy.

IX. That the employment of version as an alternative to craniotomy, as a routine practice, is terribly hazardous to the mother, although it probably sometimes saves the child's life.

X. That in a generally contracted flat pelvis, if the child be of average size, and the degree of contraction be at all great, version is entirely inapplicable. A *short* trial should be made with the forceps. If no progress be made, craniotomy should be performed at once.

---

### Rheumatism in Early Life.

---

DR. H. D. CHAPIN read a paper recently in the New York Academy of Medicine, in which he gave the chief features of a series of seventy-six cases of rheumatism in early life which had come under his own observation. He

also referred to the views of different authors as to the frequency of this affection in early life. While most authorities admitted that it might occur, the majority appeared not prepared to consider it a common affection in infancy. Of Dr. Chapin's list, one patient was aged only six months, another eleven months and a third twenty months; there was one aged three years and two aged four years; the oldest was seventeen years of age.

Heredity was recognized as a causative factor in a large number of cases in which definite information could be obtained on this point. Most of the cases of rheumatism in early life occurred in girls. He had no explanation for this fact. The lower extremities were most frequently affected, particularly the knee. There was more likely to be soreness on exercise rather than actual pain. Swelling and redness of the joints were absent in most cases. There was a repetition of the attack in a large number. A very general feature was marked hydræmia; and this was an important factor in diagnosis and treatment.

Of the seventy-six cases, twenty-six had rheumatic valvular disease, in most instances there being a mitral regurgitant murmur. This was the proportion found by Senator. He thought the heart was more often slightly affected by endocarditis in mild attacks of rheumatism than was generally supposed, but there might remain no permanent lesions. He thought acute endocarditis usually gave rise to less constitutional disturbance in children than in adults, and it was liable to be overlooked. He once presented at the Pathological Society a heart in which all of its structures were so affected as to be nearly destroyed from an attack of rheumatism which was so mild as to have passed for "growing-pains."

Regarding the relation of chorea and rheumatism, he had once published a paper on this subject, and his belief had been confirmed by more recent observations. In thirty-five cases of both rheumatism and chorea the majority of the cases first showed rheumatism; a few first manifested chorea. He had four cases of chorea with a cardiac lesion in which there had been no rheumatic attack.

Tonsillitis was present just before, at the time of, or just after the attack of rheumatism in nineteen cases. It was not proved that this was more than a casual connection. Rheumatism was sometimes accompanied by various other affections. He had been unable to recognize any difference



between the rheumatism accompanying scarlet fever and ordinary attacks.

The diagnosis must be made from a collection of symptoms. We should exclude the pains of over-exercise and those of injury.

Regarding the lactic-acid theory of the causation, Dr. Chapin was disposed to regard it as the correct one, and pointed to the fact that many of these patients had poor digestion and acid fermentation of food, and in treatment it was important to regulate the diet and general hygiene. He thought children were apt to receive too much sugar and starchy food. As soon as a child complained of pain, especially if there was a family history of rheumatism, attention should immediately be given. It should be placed in a warm room, and salicylate of sodium should be early administered, thus preventing the occurrence of heart-complications. If these should occur, it was of the greatest importance that the child should be restrained and exercise secured. There should be subsequent tonic treatment, for most of this class of patients were ill nourished. They should have a prolonged course of iron and cod liver oil, and occasionally other tonics.

#### DISCUSSION.

Dr. John C. Peters thought the largest number of cases of acute rheumatism in children were unattended by any visible joint complication, the child simply complaining of pain in the muscles and soreness on being lifted. If the heart became affected there would often be evidence of it on examination long before the child would call attention to distress in that region. There was also evidence of valvular disease in a large number of cases of chorea, an affection which was often seen in rheumatic children. Dr. Peters had been accustomed to recognize many inflammations of mucous membranes as rheumatic manifestations. He thought the acid theory of rheumatism the true one, but as to what was the nature of the acid we were not so certain. He had sometimes thought that formic acid had as much to do in the causation of chronic rheumatism as had lactic acid. In the treatment he used salicylate of potassium in preference to salicylate of sodium, and he also made use of potassa baths. To rub the child with fine chalk certainly made it feel comfortable. For the anæmic state he gave tartrate of iron and potash. He believed a large number

of cases of nephritis were essentially rheumatic affections.

Dr. J. Lewis Smith continued the discussion by a brief paper, in which he gave the points of chief interest connected with seventy-three cases of rheumatism in early life which he had seen during the past fifteen years. As to the *materies morbi*, whether it was lactic acid or something else, he thought observation proved that an attack of rheumatism was most likely to occur after exposure to cold or change of weather, scarlet fever, and in those whose family gave a history of rheumatism. One attack seemed to predispose to another.

Rheumatism occurred rarely before the second year of age, but there was no doubt that it did sometimes occur as early as the sixth month. In most instances it was a mild disease, the child not being confined to bed. It was less painful than in the adult, and was seldom accompanied by so much swelling and redness. In many cases swelling and redness were not appreciable. Many mothers mistook it for growing-pains, and looked upon it as a favorable indication. Occasionally, instead of commencing in the joints of the lower extremities and travelling upward, it commenced in the upper extremities and traveled downward. This was especially true in scarlatinal rheumatism.

Rheumatism in children was a dangerous disease, on account of the liability to affection of the heart. In many cases the endocarditis occurred as early as the second or third day, and in some instances it was present before the child complained of the disease in the joint. The mitral valve was most frequently affected. The action of the heart was usually sthenic. The fact that the myocardium was usually not attacked and the action of the heart was strong, was conservative in more ways than one. Pericarditis was much more rare.

As to the connection of chorea and rheumatism, in thirty of a series of sixty cases of chorea there was a history of rheumatism in the patient or immediate relatives. Dr. Smith emphasized the importance of early diagnosis and treatment in order to combat heart-complication. He believed that the treatment with salicylate of sodium was often begun too late, and that the drug was administered in too small doses. It acted less as a specific if the disease had continued several days than if it were given during the first, second or third day. He would administer ten or even fifteen-grain doses of salicylate of sodium to a child four or five years old.

As to lactic acid in the system from imperfect digestion being the cause of the affection, he doubted it, because rheumatism seldom occurred in young infants, whereas these were most troubled from acid fermentation of food.

Dr. Malcolm McLean thought there was nearly always a hereditary history of rheumatism, and that most cases of rheumatism in early life appeared in girls. Perhaps clothing and muscular activity would account for the less frequent occurrence of the disease in boys. He emphasized the importance of "growing-pains," which he believed to be invariably rheumatic. He usually found pain in the hamstring muscle and calf of the leg. He had noticed accelerated heart-action in cases in which no murmur could be appreciated.

Dr. L. E. Holt thought the diseases of adults commonly had their analogues in children, and rheumatism, as had been shown by this discussion, was not an exception. He had not seen more than half a dozen cases of rheumatism in children in which there was swelling, redness and pain, and the marked symptoms of the disease as it appeared in adults. But if the symptoms described by Dr. Chapin were to be considered rheumatic, then the disease was common in early life.

Dr. Ketch had seen quite frequently cases of hip-joint disease, and even of Potts' disease of the spine, in which he had succeeded in tracing a distinct history of rheumatism in the parents. He thought the question of the relation of rheumatism and chronic joint-disease had not received sufficient attention from specialists in orthopædy.

The President said he had been expected to participate in the discussion of this subject, but the lateness of the hour would prevent. He, however, made a few remarks, and referred to a monograph relating to this subject published by him about nine years ago, and which Dr. Chapin had mentioned. As to "growing-pains," he thought they were frequently rheumatic. There were some cases, however, in which the pains complained of were properly growing-pains, as they occurred in cases of rapid development of the epiphyses from physiological hyperæmia, and often in children just recovering from scarlet fever or other acute disease. He did not have in mind those cases in which there was a rachitical diathesis. There were also some cases of pains about the joints rather than in them which were due to a neurosis, and not to rheumatism. As

to cardiac murmur disappearing in after-years, he had witnessed a number of cases of that kind. Rheumatic murmurs rather than endocardial murmurs might also disappear within a few hours or a few days after their recognition.

Dr. Sell referred to a case in which a cardiac murmur which had been present in a young lady disappeared later in life.—*Medical Times*.

---

### Stretching the Sphincter Ani.

---

At the close of a recent lecture on the "Surgery of the Male Perinæum," Mr. C. G. Wheelhouse said that by London surgeons, as a rule, the operation of "stretching the sphincter" is neither recognized, nor taught, nor appreciated; indeed, I have heard of its being scouted as unsurgical and unnecessary. Introduced into Leeds by the late Mr. Teale, the practice of "stretching," in preference to "cutting," the sphincter has been upheld for twenty-five years, at least, and of late years has rather grown than declined in your favor. The principle upon which it is based is, of course, the one formulated and eloquently preached by the late Mr. Hilton, that the true cure for parts suffering from irritation is to place them physiologically at rest; and the ground upon which we prefer it, is that by it we can attain our end without causing an external wound, and thereby rendering our patient liable to septic poisoning.

Consider, for a moment, the position and office of the sphincter, to guard the rectum from the involuntary discharge or escape of its contents. This, so long as the rectum is at peace, it is capable of effecting easily, perfectly, and without strain, and its ordinary action is neither violent, nor spasmodic, nor irritable. But suppose some sort of irritation to have arisen in the bowel—acute diarrhœa, chronic ulceration, fissure, fistula or piles—and what will be the state of the sphincter then? In direct proportion to the amount or of the duration of the continuance of the disease, it will become hypertrophied and strengthened to enable it to maintain its power and its office; and, in time, it comes to be enormously more powerful than is natural, or, were the parts in a healthy condition, necessary.

Piles, supposing them to be the cause of the irritation, are perpetually tending to protrusion, and are ceaselessly warring with the muscle; from time to time, when the fæces



are passed, the piles are protruded with them, remaining after defæcation in the grasp of the sphincter; they are crushed and bruised, and become inflamed and painful; and even though they be released from their imprisonment, as they usually are, by the patient, and are returned into the bowel, it is only to continue there the war with the sphincter and to prolong the agony. Or, suppose that a painful ulcer or fissure exists within the margin of the anus, and immediately within the anus is their most common seat, what will then be the state of affairs? The discharge from an ulcer or from fissures can not get away, the sphincter will not permit it to do so; it accumulates and irritates the muscle, this retaliates by increased contraction, and thus the war goes on, to the infinite disadvantage of both parties concerned; the ulcer spreads, the fissure deepens, and the sphincter hypertrophies.

Sometimes, in the case of fistulæ, matters do not become quite so accentuated or acute, for the matter finds a vent in the perinæum, beyond the range of the action of the sphincter, and the direct irritation to the muscle is so much the less; but in one and all these cases alike, you will have been, or you will be taught, and every text-book you read will reiterate the fact that, for their cure, you may do whatever you will, but you will not succeed until you have put the sphincter at rest, and you are invariably assured that its division with the knife is the only way to do it.

Now, this is the point which we in Leeds contest. We assert, and we assert it upon abundant practical experience, that careful, deliberate and efficient stretching will do all that incision will do; and, doing it without causing any external wound, will subject the patient to far less risk than is possible by incision. Some of you may smile at the idea of there being any risk in so simple an operation as division of the sphincter, but there are such things as accidents; Sir James Paget has most appropriately termed them "catastrophies of surgery," which ought never to be forgotten and should be avoided, where possible, by any amount of foresight on the part of the surgeon. One such, in connection with the subject under consideration, happened to me in my early days; and so profound was the impression it made upon me, that to forget it even now is quite impossible. For a painful fissure of the anus, I passed a bistoury along its track, divided its indurated base, and, with that, the resisting sphincter underlying it; but in less than a week my patient,

the father of a young family, was dead, having very speedily after the operation been attacked with acute and fatal septicæmia. By stretching, in preference to cutting, we have it in our power to avoid this risk, at any rate; and in my experience, the best method of doing it, where possible, is with the fingers, or, if need be, the thumbs alone. Let the patient be placed fully under the influence of ether, and then, according to the amount of the hypertrophy, or the degree of resistance in the sphincter, dilate it steadily, either with the fingers or with some appropriate instrument, until you have overcome all undue resistance, and can leave the anus soft, patulous and free from irritable tension.

I have heard the question carefully discussed, as to whether the digital or the instrumental method of dilatation is the best. Personally I prefer the digital, because my object being to tear so much of the muscle across (the mucous membrane over it remaining intact) as shall be sufficient to diminish without destroying its whole power, I can, when my fingers are the instrument used, feel with them when I have done what I wish, and I need do no more. But so great is the hypertrophy sometimes, that the fingers, even of the strongest hands, are quite inadequate to the task of overcoming it. In such cases I usually dilate steadily first with the instrument till I can withdraw it (wide open) with freedom and without resistance; or with a tenotomy knife, I divide subcutaneously a given proportion of the hypertrophied muscle; and after that I carry on, where it is necessary, any further dilatation with my fingers.—*British Medical Journal*, February 6, 1886.

---

### Hypnotics and Hypnone.

---

IN no branch of therapeutics is the search being prosecuted with more eagerness than among hypnotics. But we can not say that there are more than three substances which can be relied upon as having distinctly established themselves in the favor of the profession. One is the old stand-by opium, the second is chloral, and the third is hyoscine. To this perhaps should be added a fourth remedy—paraldehyde. The general action of opium as a hypnotic is so well known by every one that it is a waste of words to say much about it, but perhaps we may be pardoned for calling attention to the fact that when the insomnia is produced by pain this

drug remains still *facile princeps*. When, however, the case is one of pure insomnia, opium is, in our experience, distinctly inferior to chloral. Chloral does not relieve pain, although it may force sleep. Experiments show that the rabbit under its influence, if the dose has not been too large, is absolutely hyperæsthetic, though when left alone it sleeps quietly. We have often heard neuralgic patients violently affirm that they would never again take chloral, because the sleep was accompanied by frightful dreams of agonized suffering—a sleep built upon an under-foundation of pain. In very many cases the combination of chloral and morphine acts much better than does either remedy, producing sleep more certainly and with less disturbance of the digestion, and less after-depression. Fifteen grains of chloral, with a quarter of a grain of morphine, will almost always triumph; and in mild cases ten grains and an eighth are sufficient.

A very important fact to be borne in mind in regard to persons in whom the after-depression from opium is excessive, is that this after-effect can be largely prevented by using the deodorized tincture of opium, and administering with it a full dose of the bromide of potassium. How the bromide acts under these circumstances we do not know, but that it does act is certain. Perhaps in three-fourths of the cases it renders the opiate tolerable to the system of the person who otherwise could not endure it.

Hyoscine was practically introduced to the profession through our columns, and we have therefore watched it make its way with considerable interest. It seems to be clearly proven that it is a most invaluable remedy, finding especial application to those cases of insomnia in which the sleeplessness is the result of excited brain action. Whether this excitation passes beyond the lines of sanity, or simply reaches the condition in which a perpetual tumult of thoughts and ideas crowd away sleep, hyoscine is of equal service. In very many of these cases opium in less than immoderate dose produces absolute wakefulness. There is one possible application of hyoscine which has not yet, as far as we know, been made, and in which we are very anxious to see the alkaloid tested; namely, the delirium of low fevers. As we have before stated, when there is any trouble about the throat and larynx, the drug should not be used; but in the low delirium of typhoid and other allied fevers, hyoscine ought to produce quiet sleep without injury.

With paraldehyde we have had a very small amount of experience, but as a simple soporific it does seem to have some power, and is probably similar in its action on the cerebrum to chloral, but much inferior to that drug.

The latest candidate for popular favor is the so-called hypnone. This substance is soluble in water, has a horrible taste, recalling that of creosote, and can only be properly administered in gelatin capsules or pearls. It is also violently irritant, and, being soluble in oil, it may be given in it. The most recent researches with this substance, however, throw very grave doubts upon its practical value. It undoubtedly will produce in the lower animals and in man, given in sufficient doses, profound sleep. In toxic amounts it causes insensibility and asphyxia, preceded often by hæmaturia.

In the report recently presented to the Academy of Sciences by Messrs. Mairet and Combemale (*Comptes Rend.*, ci. 1506, cii. 178) it is stated that in experimenting with four different samples presenting the characters attributed to acetophenone, or hypnone, obtained from different houses of good repute, they found that its immediate effects upon animals had nothing in common with sleep. Administered in therapeutic doses to a healthy man and to twenty-one patients suffering from mental affections, in only one case was sleep produced; in none of the others did it exercise any hypnotic action. So negative were these results that the reporters suspected whether they had been using true hypnone. Therefore, following Friedel's process for the preparation of acetophenone, a mixture of acetate and benzoate of lime was submitted to dry distillation. Upon heating the mixture over a bare fire, a brownish liquid distilled over, having the odor of bitter almonds, and not crystallizing at  $0^{\circ}$  C. like acetophenone. Intravenous and hypodermic injections of this liquid produced in animals results similar to those obtained with acetophenone, but of greater intensity. In one case an intravenous injection produced syncope, and afterward vomitings, alternating with profound sleep for upward of six hours, the animal dying two days afterward. When the mixture was heated gradually, a heavy yellow oily liquid passed over, having an odor recalling that of acetophenone, but not crystallizing at  $0^{\circ}$  C. This liquid also produced symptoms similar to those produced by acetophenone, but in much smaller doses.

Hopeine is the narcotic alkaloid of American hops iso-



lated from all extractive matters, and has hitherto been but little used, though it is said to be a powerful and pure hypnotic. In England, Williamson, Smith and Roberts have examined the physiological action and gauged the therapeutic efficacy of the drug. All three observers unite in regarding the new hypnotic favorably. In the *Wiener Mediz. Presse* of January 31, we also note that Dr. Lang, of Vienna, has tried a limited sample of hopeïne, which was forwarded to him from London. It is, according to Lang's sample, a white powder of an exceedingly bitter taste, and insoluble in water. Lang reports the results of his trials with the drug in a few cases of phthisis pulmonalis and idiopathic insomnia. In a phthisical woman, who for an entire week had taken every night fifteen grains of urethan without effect, a dose of  $\frac{3}{10}$  gr. of hopeïne sufficed to produce a sleep lasting for five hours, and being but once interrupted by coughing. The same small dose produced also in other phthisical patients a sleep of four, five and six hours' duration without any considerable interruption through coughing.

It is asserted that hopeïne-salicylate is a very eligible preparation; it comes, dissolved in "condensed beer," in small vials, containing each 12 c.c. (1 c.c. (16 gtt.) of the solution corresponding to  $\frac{15}{100}$  gr. of hopeïne), and is given in a dose of twenty to forty drops. It is likewise a very active hypnotic. In children having measles or chicken-pox Lang succeeded repeatedly in producing an otherwise unattainable sleep of four to eight hours' duration by four to eight drops of this medicine. Subcutaneously the muriate of hopeïne can be employed in a watery solution, and in Lang's hands has never failed to act promptly, and to be exempt from all secondary untoward effects. Lang does not hesitate to rank hopeïne among the best of our hypnotics in view of its promptness and innocuousness. In connection with this subject it should, however, be stated that, according to Bardet, Pettit and Dujardin-Beaumetz, hopeïne is identical with morphine, and this statement is so made as to leave the inference that hopeïne is simply morphine under another name. In our next issue we may possibly have some further information on this subject to lay before our readers.

The same pharmacologist reports in the *Wiener Medizinische Presse* of February 7, 1886, on another supposed hypnotic, viz., the glucoside of boldo. There appears to be but little known about this drug. In the *Therapeutic Gazette* of

May, 1885 (p. 500), we find it mentioned as a substitute for cocaine, and the statement that as such it had been used successfully on the cornea by Laborde. According to Lang, it is a yellowish white powder, which produces, when placed on the tongue, a pricking and slightly burning sensation. It is affirmed to be a hypnotic, and to cure liver affections and catarrhs of the bladder. Lang tried boldo in a vesicular catarrh resulting from a gonorrhœa, and with a perfect failure; neither pain nor dysuria were relieved in the slightest by the drug. Lang leaves the merit of disproving the hypnotic virtues of boldo to another ambitious experimenter.

---

### The Treatment of Alopecia Areata.

---

DR. G. T. JACKSON publishes an interesting article in the *New York Medical Journal* of February 20, 1886, "which contains many points of value as to the treatment of this form of baldness. In the first place he points out that the hygiene of the patient should be looked after, and it will be often found that tonics are required, and of these cod-liver oil, iron, and phosphorus are the most useful.

The local treatment consists in stimulation of the scalp. In the beginning of treatment it is well to remove by epilation all the loose hairs about the margins of the patches. The best method of effecting this is by pulling the hair between the thumb and an ordinary spatula or stout cord held in the hand.

For stimulants, carbolic acid, tincture of cantharides, cantharidal collodion, tincture of nux vomica, veratrine, capsicum, phosphorus, or aconite, sulphate of quinine, strychnine, liquor ammoniæ fortior, sulphur, bichloride, yellow sulphate, and oleate of mercury, croton oil, and castor oil, each and all have their advocates, and are used either separately or two or more of them combined. As the diseased scalp will bear, as a rule, a good deal more stimulation than the healthy scalp will, we must regulate the strength of our chosen stimulant solely by the amount of reaction it causes. Thus, liquor ammoniæ fortior, in full strength, may be freely applied to the scalp, and its use persisted in for weeks without apparent overirritation of the scalp.

Good results have been reported from the use of electricity, the galvanic current being used with one pole at the

nape of the neck, and the other brushed over the affected parts. Hypodermic injections of  $\frac{1}{8}$  to  $\frac{1}{10}$  grain of the hydrochlorate of pilocarpine every few days are well spoken of by some observers.

The treatment by blistering has in some cases produced rapid results. For this purpose either croton oil or cantharides may be used. Thus, Horand advises painting the bald spots with croton oil, covering with cotton, and wearing a hood over all. If ulceration is caused, the part is to be dressed with olive oil. When healed, the application of the croton oil is to be repeated. This method of treatment is to be continued till the hair grows. Vidal recommends the following: If the subject is a child, the whole head is to be shaved. If the patient is older, the scalp is to be shaved for half an inch around the bald spot. Now apply a blister, which should never be larger than a twenty-five cent piece, to each bald area, putting it on in the morning and taking it off when the epidermis begins to rise. If a large bleb forms, it should be opened. Powder the blisters with starch and cover with linen. If there are numerous bald spots, apply the blisters to them successively. If the hair does not grow after thorough blistering, repeat the operation as soon as the effects of the first application have disappeared. If blisters are not well borne, use sinapisms. When the hair begins to grow, shave, and rub in, every morning and evening, a lotion of,

R<sub>x</sub>. Liq. ammon., 4 parts;  
Alcohol, 16 parts;  
Decoct. foliæ juglandis, 120 parts, M.

For alopecia areata of the face he uses blisters in some cases. Generally he has the part shaved every day and uses frictions of tincture of cantharides, either pure or with one-fifth to one-sixth tincture of rosemary.

In a few cases Dr. Jackson has produced benefit by using a pomade of jaborandi made by boiling down the fluid extract to one-half its volume, and adding this to lard in the proportion of one of the jaborandi to four of the lard. This is to be thoroughly rubbed in twice a day. In the first case of the recurrent type, the hair in two relapses returned under this treatment in the course of ten weeks. But it had no effect in preventing the formation of new patches. In the second case, occurring in a child with chorea, after the use of various other remedies for three

months, the spots continually growing larger, the jaborandi was used, and in ten weeks the disease had ceased spreading, and the hair was growing on every patch. In a third case, affecting the mustache of a medical student, its use was followed in seven weeks by the appearance of new hairs in the patch, shaving being practiced at the same time. In all these three cases the return of the hair took place some six or seven months after the beginning of the disease.

In his last cases of alopecia areata, Dr. Jackson has used a solution of corrosive sublimate, not on account of its parasiticide qualities, but solely for its stimulating effect. The strength of the solution used was three parts of the bichloride of mercury in one thousand parts of water, or say one grain and a half to the ounce. This was applied once or twice a day, and has given satisfactory results.

---

### A Specific for the Treatment of Hernia.

---

DR. DOROTEO DE ARMAS publishes an article in the *Union Médicale de Caraccas* (*Bull. Gén. de Thér.*, No. 28, 1885), in which he claims that the peasants of Venezuela produce a radical cure of hernia by means of a parasitic plant which grows on the *Bowdichia virgiloides*. The boughs of this parasitic plant are stripped of their leaves, and then scraped with a sharp instrument so as to remove all the inactive portions of the bark; the remainder is then chopped up and mixed with water to form a semi-solid paste. After the lapse of some time an extractive matter separates, which is at first greenish, but then becomes almost black. It is elastic, semi-solid, and capable of being drawn out in long filaments, which stick to the hands, and gradually harden when exposed to the air. The mode of employment is to spread a thick layer of this substance on a piece of linen, and, after having well shaved the skin, to apply it over the hernial tumor, where it is maintained from forty days to two months. Dr. Armas refers to two cases of cure with which he is himself personally acquainted. He believes that this mode of action is on the one side attributable to its contraction, and so renders it analogous in its application to a truss; and he believes, on the other hand, that it exerts special influence over the hernial rings.



## The Treatment of Ringworm of the Scalp.

At the last meeting of the Medical Society of the State of New York, Dr. Frederick C. Curtis gave a summary of the results which followed his treatment of a number of cases of this affection. Oleate of copper was first used, but its employment was not followed by any benefit. Chrysophanic acid was next tried in a variety of ways. First, a ten per cent. solution in liquor gutta-percha was tried, as has been recommended by Dr. W. T. Alexander. The heads were shaved once a week, and, after they had been thoroughly scrubbed, this mixture was painted over the affected spots, in some cases nearly the entire scalp. It makes an impervious, dry covering or mask, liable to crack, however, and all such cracks and all loosened places received additional coats daily. A number of patients were materially benefited by this, but very few permanently, though some were cured.

Another method of applying chrysophanic acid was used by Dr. Henry Hun, of the medical staff. After the scalp was shaved, an ointment, of the strength of a drachm and a half to the ounce, was rubbed into the spots, which were then covered with successive layers of adhesive strap. This, as might be anticipated, produced a good deal of irritation and œdema, but in no case suppuration. It was repeated two or three times at considerable intervals. Some cases were cured by it alone. It is to be recommended only for limited areas and with caution in an ointment of this strength, and it is not desirable to attempt entire destruction of the parasite with it, but to complete the cure by simple means.

Chrysophanic acid was also used, as proposed by Dr. Alexander Smith, in solution in chloroform, seven grains to the ounce. In these cases depilation was used daily, the solution being applied after it. The chloroform penetrates the hair-follicles more effectually than other agents. It produces no irritation of the scalp, and is of value. It was used only after the other appliances had been employed. It has no advantage, however, over an ointment of carbolic acid, or one of the tars with a mercurial ointment. By means of these two appliances, with depilation, all the cases not previously cured were brought to an end about the last of July, some four months after treatment of the epidemic was begun.

Dr. Curtis' conclusion is that chrysophanic acid is a reliable parasiticide, and that, combined with an impermeable covering, it will cure a fair proportion of cases without the labor of depilation, materially relieving those not cured; that it does not act by setting up a suppurative inflammation, being as to this well borne by the scalp. The impermeable covering is of very considerable value, not only as neutralizing the conditions favoring reinfection, but also by evidently hampering the growth of the fungus, if not to a degree destroying it. In none of the cases has permanent baldness resulted. It has been said that tinea capitis will finally disappear without treatment, but the natural history of the disease must be a long one; under the most fortunate treatment it will last from three to six months usually.

In regard to the exact point of time when the disease may be pronounced cured, it is often difficult, though always important, to determine. Duckworth's chloroform test, by means of which, as asserted, the hairs containing fungus are turned a distinctive white color, is not of value, since it would only be appreciable when the amount of fungus was considerable, and also since the hair is far from normal even when the fungus is completely destroyed. The microscope is also of negative value, for it often failed to discover fungus in cases when the disease was not cured. As to the growth of healthy hair, in old cases this will not appear till long after the disease is cured. The best test is the appearance of the scalp itself. If, after one or two weeks' suspension of all treatment and washing, the cuticle is found free from the ashen-gray scales and the goose-flesh appearance, and the still bald patch is smooth, of a normal color, and free from the stumps of broken hairs, it is then safe to discharge the patient from quarantine. The entire surface of the close cropped scalp must be searched for possible foci. Often the question will be complicated by the scaliness of slight eczema or pityriasis. But generally we can trust to this test.

---

## The Treatment of Incontinence of Urine in Children.

---

THERE is scarcely any disease occurring among children more annoying and troublesome than incontinence of urine. It is particularly vexatious to parents, and is often regarded by them as an incurable infirmity. After their patience has

been long tried, they abandon one remedy after another and look forward to puberty, when, they are told, the disease may depart, never to recur. According to Dr. Day (*Brit. Med. Journ.*, February 13, 1886), failure in treatment is frequently owing to an erroneous diagnosis of the affection; to the inefficiency with which the treatment is carried out; to its being discontinued too soon. Among the causes of enuresis, the following may be enumerated. If the urine be excessively acid or loaded with urates, the bladder becomes overstimulated and readily discharges its contents; if the bowels be habitually constipated, or there be worms in the intestines, vesical irritation may ensue; or, if the child be guilty of masturbation, there will be no chance of cure till the habit is corrected. Weakness of the muscular coat of the bladder from general debility or anæmia is a very common cause; the bladder, not being able to tolerate any quantity of urine, readily excites the motor apparatus. Dr. Day has known a troublesome case follow typhoid fever in a boy ten years of age. If the disease be owing to a long prepuce, causing phimosis, it should be removed. Sometimes no cause can be ascertained. Children two or three years of age frequently wet the bed, either from laziness or from lack of control over the bladder. It is important to remember that, even though the secretions are in perfect order, the incontinence may continue, and thus a habit may be formed which the poorer classes and stern people occasionally endeavor to correct by punishment. In some idle and dirty children such a course may be of benefit; but in others who are nervous and timid there is the possibility of increasing the evil we desire to remove.

Enuresis is sometimes seen in connection with chronic albuminuria, and is occasionally so persistent as to require special treatment. It seems impossible to lay down a plan of treatment for general adoption; the peculiarities of constitution and habits of life must be taken into consideration, and hap-hazard treatment guarded against. Some cases are cured or relieved by the combined influence of electricity, iron, and belladonna. The successful issue is in a great measure attributable to the constant care which the mother takes in feeding the child and rigorously attending to the physician's instructions. Those cases that date from birth or have lasted upward of a year are invariably intractable and often incurable, especially if the child be of nervous parentage, or was delicate when born, or passes large quan-

tities of urine. With respect to the utility of faradism there can be no question; it requires to be used regularly, and to be continued for a considerable time, but it sometimes fails altogether. When the nervous system is weak, and there is general debility, the sphincter loses its power, and urine escapes by night and day without the child's knowledge. It is in such cases as these that iron and nuxvomica are of service.

If there be excess of muscular action, and the child have frequent inclination without power of control, belladonna is an admirable remedy. It occupies a prominent place as a therapeutic agent, and sometimes, when combined with iron, even in small doses, it seems to do good; but it should not be given up in obstinate cases, till either soreness of the throat is produced or dilatation of the pupils takes place. In Dr. Day's hands it has often failed when administered in any form or dose. It certainly tends to lessen irritability of the bladder, and should always have a fair trial.

Cold sponging in the morning is very serviceable in cases of enuresis that appear to have their origin in general debility. It braces up the nervous system and is a powerful tonic. The slight sensation of chilliness soon passes away without leaving any depression if vigorous friction with a towel be employed for a few minutes. In a case under Dr. Day's care about three years ago, the cure was attributed to this simple measure when one remedy after another had failed. The vital functions are brought into a healthier state, the skin acts better, and the appetite and digestion improve. However delicate a child may be, free sponging in tepid water, followed by a good rubbing, is of great value.

---

### The Treatment of Cholera Infantum.

---

DR. W. BYFORD RYAN closes an article in *Indiana Medical Journal* as follows:

The causes which lead to this deplorable state are, in my opinion—

1. *The enervating influence of excessive heat, producing, as in Asiatic cholera, spasm of the peripheral arterioles.*

2. *Hyperemia of the gastro-intestinal apparatus, produced (a) by chilly nights following excessively warm days, and*



(b) by the reflux of blood from the emptying of the surface capillaries.

3. The vulnerability of the gastro-intestinal viscera in the young generally, and especially in those whose digestive organs are enfeebled by premature weaning or by improper food.

Spasm of the arterioles, or what amounts to the same, paralysis of the trophic nerves, produces peripheral anemia. The congestive influence of chilly nights, added to the emptying of superficial vessels, favors engorgement of the internal vascular system. The atonic condition of the digestive organs, made more vulnerable by premature weaning or improper food, also invites the fugitive blood. *Atonic vessels long distended permit the rapid endosmosis of the serum of the blood.* Hence, vomiting, diarrhœa, *serous ejecta*, anemia, excess of fibrin and solids in the blood, and the coagulability of the blood itself, *thrombi* and *emboli*, the plugging of cerebral vessels; hence, death—if, indeed, death do not claim his victim previous to the formation and lodgment of a clot.

If this view of the causes and pathology of cholera infantum be correct, the rational treatment must necessarily be in direct antagonism to the dictum of Hahnemann, and in full accord with its antipode, *contraria contrariis*, which is—

(a.) To restore the blood supply to the surface, thereby relieving measurably the visceral engorgement.

(b.) To establish and maintain capillary action of the entire economy, thus arresting extravasation of serum with all its attendant evils.

(c.) To give tone to the muscular and mucous coats of the bowel.

(d.) To supply proper nutriment.

These are the indications. Can they be satisfactorily met?

Having come to conclusions satisfactory to myself as to the ætiology of infantile cholera, I cast about me for rational means with which to combat existing conditions.

We find peripheral anemia; belladonna is the most potential means for flushing the superficial capillaries.

We find the vascular system of the intestines and stomach engorged and sievelike, permitting liquor sanguinis to escape into the lumen of the viscus; belladonna produces dryness of mucous membranes.

We find extreme irritability of stomach and intestines,

giving rise to vomiting and excessive diarrhœa; belladonna produces partial anæsthesia of these mucous surfaces and promptly relieves this condition.

We find progressive anemia, produced by endosmosis of serum; belladonna arrests the waste immediately.

Finally, basing the assertion upon actual experiment by myself and those upon whom I have, with the earnestness of positive conviction, pressed the importance of its administration, I can safely say that belladonna will, in every case, arrest both the vomiting and the diarrhœa at once, and that no child sick of this dread summer complaint, who has a fair constitution, need be lost if it have this treatment, combined with and followed by such tonic measures and nourishment as will suggest themselves to any intelligent physician.

Minute doses of nux vomica and arsenic I regard almost as essential as tonic treatment. I refrain from suggesting formulæ, but can not close my remarks without protesting against the use of mercurials in a disorder where there is no lack of bile secretion, and where the blood is being rapidly broken down without the help of agents which produce that effect.

---

### Methods of Diagnosis.

---

LAWSON TAIT, F.R.C.S., in an article published in *New York Medical Journal*, says substantially:

It is perfectly impossible for me to convey by any kind of description how I can tell by the touch an inflamed vaginal mucous surface from one that is healthy; neither can I describe the feeling that the everted surface of the cervix gives to me which declares the condition of chronic endometritis. But I know that my educated finger-tips can make this distinction. If, on the other hand, I discover a pelvic tumor, long practice enables me to tell, with almost perfect certainty and without the use of the sound, that it is a retroverted fundus or adherent tube or ovary, or, by its fading away toward the broad ligament, on one aspect of the uterus or another, that it is an intraperitoneal hæmatocele, while the peculiar resistance of a myoma conveys to my mind an accurate impression which needs no probing the uterus to substantiate. So a cyst reveals itself in a way

I can not communicate. As a result of all this I very rarely use the sound.

As a matter of fact, I have found that these two instruments, the speculum and the sound, as methods of diagnosis, have been productive of uniformly more harm than good. That a blennorrhagic discharge from the vagina of any patient requires the introduction of a speculum is one, I am fully persuaded, of the stock beliefs of the great bulk of general practitioners. But it is certain that nothing of the kind is requisite, and a very large amount of mischief, there can be no doubt, has been produced by this belief. It is not at all an unusual thing for me, on taking part in a consultation with the family physician concerning some such case, to be told by him that he very much regretted that he had not made an examination by the speculum. Others have told me that they made the said examination, and, when asked what they saw or what they did, the answers usually given are that they did nothing, they merely made the examination; that is to say, they passed the instrument, and with that proceeding were perfectly satisfied, evidently under the belief that the passage of a speculum was quite as much a curative agent as a method of diagnosis. Similarly with the sound; I have heard many practitioners tell me of their experience with the sound, or rather their want of it, and I judged that they looked upon it as a sort of magical charm, the introduction of which into the uterus was to achieve unmeasured good. As a matter of fact, the sound is one of the most dangerous instruments which ever was invented for the treatment of human suffering, and in my own practice obtains hardly any kind of employment at all.

One of the most important methods of diagnosis in abdominal disease, and the first to be considered in examining any case, is inspection, and concerning this method a very great deal of nonsense has been talked. For example, Sir Spencer Wells has told us that inspection will reveal the presence or absence of adhesions; but, in my own belief, and certainly from the experience of cases in which Sir Spencer Wells himself has made the diagnosis, there is no possibility of determining by inspection, or any other method, the presence of adhesions anywhere in the case of an abdominal tumor.

A careful examination, by the eye, of the contour of an abdomen, when the patient is lying on her back with the

walls of the abdomen perfectly flaccid, will reveal a good deal to the experienced practitioner. A completely and uniformly distended abdomen may mean that the patient is suffering from peritonitis, intestinal obstruction, ascitic effusion, a parovarian tumor, an ovarian tumor, a large myoma of the uterus, or pregnancy. The process of discriminating between these various conditions may very rapidly be completed by one who is accustomed to dealing with them. Thus, peritonitis may be at once detected or eliminated by the presence or absence of the short and rapid pectoral breathing, which shows that the patient is loth to use her diaphragm. In fact, by this alone, and without almost any further inquiry, I have satisfied myself as to the nature of the case by a single glance. Ascitic effusion, on the other hand, is revealed at once by the absence of the pectoral breathing, by the greater flattening of the distension, by its tendency to assume a pyriform shape, the broadest diameter just above the pelvis, by the thickening of the walls due to anasarcaous effusion, and the presence of white lines in the skin of the flanks. If the crest of the ilium sticks out under stretched skin, the diagnosis is again almost complete without further inquiry. If, on the other hand, these subsidiary features are absent, and there be a uniform and complete distension, two conditions widely distinct may be suspected. These are parovarian cyst and hydramnios; and here again some very curious mistakes have come under my notice, some of which have had very ghastly results. Parovarian cysts after labor sometimes grow with astonishing rapidity. Hydramnios occurs always with twin pregnancies, and generally in unmarried women, who are, of course, disposed to conceal their unfortunate condition, and where inspection can not be depended upon to discriminate these cases. But inspection will help us very largely to detect pregnancy and myoma, for in these cases the distension is always greatest either at the middle of the tumor or at its upper part, differing in this way completely from ascitic distension; and here one of the most important agents in the diagnosis of abdominal diseases—palpation—comes at once to our assistance, and to the skilled fingers it ought not to take more than a few seconds to discriminate between all and any of these conditions. The percussion note which is uniform in a case of peritonitis, will easily determine the condition which is present. One or two delicate touches of the fingers of one hand, while the fingers of the other lie



with the most gentle lightness on the other side of the abdomen, will determine the presence of fluid, and it is in this method of palpation where the fingers of the skilled practitioner at once become visible. The inexperienced hands press firmly upon the walls, and may be seen to move to and fro in an aimless fashion, as if they intended to rock a cradle. The gentlest and tenderest touch alone will reveal what is required. A few trials of the different diameters of the abdomen will teach in as many seconds the leading features which are present; First, that there is fluid; secondly, that it is, or is not, near the surface, being contained, or not so contained, within a thin-walled cyst; thirdly, it is one cavity or not; fourthly, the probable character which it presents. The wave excited by gentle tapping is retarded or urged on by the more or less gelatinous nature of the fluid. All these conclusions can be indicated with the utmost rapidity to the skilled fingers, and it is absolutely impossible to teach how this can be, save by the constant practice of the pupil. The parovarian cyst may be diagnosed entirely from one condition—that is hydramnios—and, partly by its thin walls and partly by the presence of hydramnios, to which I have alluded, is very easily detected. Ascitic fluid is revealed in the same way, with the additional fact that here and there we get tympanitic percussion notes.

The large uterine myoma is defined by its firm sense of resistance and its uniformly full and pseudo-fluctuation, also by the fact that it has a smaller diameter at the base than it has at the middle or upper part. Pregnancy, the rock ahead to inexperienced practitioners, can be infallibly revealed by palpation. First of all there is fluctuation, due to the liquor amnii, and it can be easily detected, and this declares the cystic nature of the mass. If the hand be made to lie gently on the parietes for a few minutes, a rhythmical contraction of the uterus, by which at one time it is hard as a cricket-ball and at another soft as a cushion, will become perfectly apparent, and this is an infinitely more certain sign than the foetal heart or the sound of the placental *bruit*. The foetal heart is a sound which may guide and sustain the practitioner in his conclusions; but it is so easily imitated by intestinal noises, and so difficult often to find, that it is not to be depended upon with perfect certainty. The placental soufflé is probably more certain than the foetal sounds, but placental sounds are very often, in rapidly growing tumors of the uterus, so completely imitated that there

is always a certain amount of doubt connected with them ; but the relaxation and contraction of the uterus in pregnancy is a method of diagnosis which, when once made apparent, can never be mistaken for anything else.

If I may, in conclusion, take one more illustration to show how completely the results of daily practice, or what may be called rule of thumb, may triumph over the mere teaching of the schools, I would mention the much discussed bimanual method of examination. I read recently a long rigmarole of nonsense, by a German, who evolved from his superabundant inner consciousness, but not from clinical experience, the conclusion that no man could properly examine the pelvis in this way unless he had the patient on her back, turned in the lithotomy position, he being placed opposite the perinæum. In the first place English women would not submit to such brutality, and it is wholly unnecessary. The most complete and satisfactory examination of any woman's pelvis can be made while the patient lies quietly on her left side in bed without the exposure of one square inch of her skin. Any man who requires more than this is either a pupil or a dullard.

So it is with such a special instrument as Sims' speculum. I have heard some of my American friends say that it is impossible to do any operation on the vagina satisfactorily without it. All I can say is that I have now cured some three hundred cases of vesico-vaginal and recto-vaginal fistulæ, never having failed in any case nor having ever refused one, and I habitually passed the sutures with my finger-tips, wholly unaided by a speculum of any kind.

---

### Renal Hemorrhage.

---

BY WILLIAM G. RING, M.D., BUFFALO, N. Y.

---

ON the evening of October 7, 1885, Mr. A. N., of this city, presented himself for treatment, and gave the following statement of his case: He said he was eighteen years old; that, bodily, he had developed very fast within the last year; that he was employed in a stoneyard to assist in moving large stones; that several days previous, after lifting, with help of two other men, a stone weighing about 600 pounds, he had experienced severe pain in the lumbar region, and

noticed that his urine had become very red in color, apparently due to blood.

He was then examined physically. On passing the finger along the track of the urethra below, from behind forward, no blood escaped from the meatus, and he said no clear blood had escaped that way between the acts of urination. Next, a flexible catheter was introduced into the urethra as far as possible without entering the bladder, and then it was withdrawn. The passage of the catheter was painless, and it showed no trace of blood after withdrawal. The urethra, as a possible source of the hemorrhage, was then considered to be eliminated from the diagnosis. The catheter was then introduced into the bladder, the small bone tip on the end having been removed so that a bulb syringe could be attached. About four ounces of highly-colored urine were drawn off. The end of the catheter was then connected with a Davidson syringe, and about six ounces of tepid water were injected into the bladder and immediately withdrawn, and about eight ounces more thrown in. The six ounces first injected, on withdrawal, were pale compared to the urine. The latter injection was allowed to remain about thirty minutes, long enough to become mixed with any blood that might come exclusively from the interior of the bladder, but not so long as to become tinged with blood from ureters or kidneys. The water was allowed to flow from the catheter, and came away scarcely tinged. As no pain had been felt in the bladder, no intermittent flow of urine, or any other symptom that seemed to point to it as the source of hemorrhage, the examination proceeded. No examination was made for calculus. The ureters were excluded from purely circumstantial evidence.

First. The absence of tubular casts which would most probably have been present had one or both ureters been the source of hemorrhage and perceptible to the unaided eye.

Second. The fact that the probable cause, viz., the great effort at lifting, which is generally accompanied by temporary cessation of breathing, the lungs being fully inflated, would tend to lessen the tension on the ureters, thus protecting, instead of harming, them.

A test tube, containing an ounce of the colored urine, held between my eyes and light, presented a very uniform appearance with regard to the distribution of the red coloring matter.

The patient was then questioned in regard to his food,

whether he had eaten any beets, red cabbage, madder, etc., which might tinge his urine red, to which he gave a negative reply. A sample of the urine was then boiled. It lost its red color, and a large number of brown flocculi formed, floating in a fluid having the light yellow color of normal urine.

As there was only one probable source of the hemorrhage left, that of the kidneys, one or both, most likely from the cortical portion, the diagnosis of renal hemorrhage was made.

The patient was given one ounce of fluid extract of ergot, with directions to take a teaspoonful three times a day—morning, noon and night—and to cease working. This he did, and came again two days after, bringing a sample of urine much less colored, but not devoid of blood.

A prescription containing

Glycerinæ destilat.

Aq. Pip. Ment., . . . . . aa. 32 grams.

Acidi Tannici, . . . . . 4 "

Morphiæ Sulph., . . . . . .13 "

was given, one drachm morning, noon, night and at bedtime, which proved effectual, and he returned to work which required no lifting after one week devoted to treatment, the hemorrhage cured, the urine being free from blood.

The cause of the hemorrhage was probably slight laceration of a small portion of the cortical substance of one or both kidneys, due to his efforts at lifting. During a strong effort of this kind, the breath, deeply inspired, is almost invariably held. As the downward limit of the kidneys' movability is placed at one-half inch, it seems reasonable to infer that the cortical portion of these organs might be slightly lacerated by the downward pressure of the posterior part of the diaphragm, against which they rest. Gray, writing in reference to these points, says that during a deep inspiration both kidneys are depressed by the diaphragm nearly half an inch, and that the renal cortical substance is of a dark red color, dense in structure, and easily lacerable under mechanical force.

Hæmaturia being merely a symptom, it is to be considered in connection with those obvious divisions of the urinary tract from which the hemorrhage may arise.

1. Hemorrhage from the urethra.
2. Hemorrhage from the prostate and the neck of the bladder.
3. Hemorrhage from the bladder itself.



4. Hemorrhage from the kidneys.
5. Hemorrhage of a general character from the urinary tract.—*Buffalo Med. and Surg. Journal.*

---

### Chicago Gynæcological Society.

---

DR. A. REEVES JACKSON opened the adjourned discussion of the treatment of pelvic abscess by reading a paper entitled

#### LAPAROTOMY FOR PELVIC ABSCESS.

Owing to Dr. Jackson's absence, the paper was read by the Secretary.

At the December meeting of this Society, a discussion arose upon the subject of pelvic abscess and its treatment. It was based upon the report of a case by Dr. H. T. Byford, which had been treated by favoring discharge of the pus by way of the rectum, and the placing within the abscess-cavity a portion of sulphate of copper to promote granulation. The discussion seemed unfinished, and was withal of so interesting a character, that I have thought well to reopen it by the relation of the following case. Whether the operation performed in the treatment of the case should be termed a laparotomy will depend upon what significance we attach to the term. Upon this point opinions will doubtless differ.

If we understand by the word laparotomy, the opening of the abdominal cavity in its largest sense, the term is here correctly used; but if, on the other hand, we mean the opening of the abdomen for the relief of *an encysted intra-peritoneal abscess non-adherent to the abdominal wall*, the term would not be properly applicable, for here there was complete adhesion, and, possibly, in the course of time the abscess might have pointed and opened in that direction, although I do not believe that such result would have occurred. Without active interference I think the disease would have resulted in death from pyæmia in a very few days.

On March 9, 1885, I visited Anna N., in consultation with Dr. Louis Braun, of this city. She was 24 years old, had been married six years, and had one child 18 months old. On February 1—five and a half weeks prior to my visit—she had miscarried, producing a foetus four months

old. A few days after that event, Dr. Braun found the patient suffering from symptoms of pelvic inflammation, which had since continued, with varying severity. He informed me that the pelvic swelling, which he detected on examination, appeared to involve all the periuterine structures, but to a greater extent on the right side; that during the past few days, however, it had seemed greater on the left side. From the onset of the attack the pulse had been rapid, and the temperature elevated—the former ranging from  $110^{\circ}$  to  $130^{\circ}$ , and the latter being persistently over  $102^{\circ}$  F., reaching on one occasion  $104^{\circ}$  F. Pain had been severe, but controllable by morphia. The appetite had failed utterly and the stomach finally rejected all food. At the time of my visit, the patient was pale, extremely emaciated, and her visage showed marks of prolonged suffering.

On examination, I found on the left side of and behind the uterus, a swelling as large as a medium-sized orange, with rather indistinct outlines. Its lower portion was in a plane with, or somewhat below, the *os uteri*, and bimanually its upper margin could be felt extending above the fundus, which was pushed strongly to the right. Both uterus and tumor were immovable. The latter had a slightly elastic feeling in some places, although I was unable to detect any certain fluctuation through the vagina, rectum or hypogastrium. Through the posterior vaginal wall, at a point about an inch above the lower portion of the swelling, I fancied I received a sensation of bogginess, and this, taken in connection with the history of the case, gave me the belief that pus was present. Accordingly, I thrust a curved trocar and canula into the swelling by way of the vagina to the depth of about two inches, with no other result than the emission of a few drops of blood. It was then concluded that the patient should have prolonged hot water vaginal douches daily, rectal feeding, and appropriate anodyne and tonic medicines.

On April 18, five weeks later, I saw the patient again, with Dr. Braun, who reported that after my former visit the symptoms had all become gradually ameliorated; the stomach resumed its functions, pain subsided, pulse and temperature became normal. No menstrual or other discharge had appeared. This improved condition had continued until two days before, when, without apparent cause, the patient had a chill, followed by rapid pulse, high temperature, pelvic pain and irritability of the bladder.

Under anæsthesia I examined the abdominal and pelvic organs. The pelvic swelling had undergone no marked change, except that it seemed to have increased in an upward direction, extending now to a point about an inch above the *symphysis pubis*. At this place I thought I detected obscure fluctuation. The swelling as felt *per vaginam* was hard at every accessible point. All operative measures were declined by the patient and her friends, and the treatment advised consisted in the administration of morphia and quinine, and peptonized milk for diet.

April 19, the patient was much worse. The pelvic pain was controlled only by large doses of morphia given hypodermically, and the stomach retained almost nothing. The pulse was 130°, temperature 102° F. It was decided that laparotomy should be performed the following day.

April 20. There were present as assistants Drs. Steele, Braun, Sterl, Dickerson and Mascheck. A spray of carbolized water had been kept playing in the room for several hours. The patient was etherized, and the bladder emptied by catheter. She was the thinnest person I ever saw placed upon an operating table. Immediately before the taking of ether her pulse was 124°, temperature, 103° F. The hair of the pubis was shaven off, and the skin of the abdomen washed with soap and carbolized water. An incision three inches long, ending below at the upper portion of the *mons veneris*, was made in the middle line of the hypogastrium. Deepening the cut, I came upon the peritoneum, which, however, could not be separated from the parts beneath. Proceeding inward through dense structures the knife suddenly entered an abscess cavity, which at once gave exit to a stream of pus to the amount of two or three ounces. Passing my finger through the opening, I found that the cavity extended downward, behind and to the left of the uterus, about three inches. The abscess walls proper could not be accurately defined. The inflammatory processes had matted together the upper part of the uterus, the left broad ligament, tube and ovary. The cavity was washed out, and a rubber drainage tube passed to the lower end, the outer portion of the tube being stitched to the edge of the wound at its lower extremity. The remainder of the wound was closed with sutures, and dressed in the usual manner.

The night following the operation the patient slept fairly without an opiate.

When I saw her the next day she had taken milk and lime-water with relish; her pulse was 108°, and temperature 100 1-5° F. In brief, the relief of the symptoms was immediate, and the recovery uninterrupted. Pus continued to discharge for more than six weeks in constantly diminishing quantity. The tube was then removed. Menstruation appeared July 20, and has been regular since. I examined the patient September 25. The uterus was still in a position of right lateroversion, but movable in a slight degree. The parts about the left broad ligament were thickened, and somewhat tender. An irregularly shaped mass occupied Douglas's space, and extended upward and to the left. The patient had gained greatly in weight, was ruddy, and doing her own housework.

In a letter dated December 29, she states, "I have no pain, and feel better than I have for four or five years."

Dr. Jackson appended the following note from Mr. Lawson Tait:

7 THE CRESCENT, BIRMINGHAM, *January 4, 1886.*

*My Dear Sir:* I have performed now thirty-two operations for pelvic abscess, in every one of which a cure has resulted.

Yours very truly,

LAWSON TAIT.

Dr. Christian Fenger said: Before entering into the discussion of the paper which has been read here this evening, I wish to remark that I came here under the impression that the entire subject of suppurative, pelvic inflammation was to be dealt with; "I now see the subject is limited to the treatment of pelvic abscess by laparotomy. The operation performed in Dr. Jackson's case I should not call a laparotomy at all, but simply an oncotomy. An abscess was opened, and the operation does not differ materially from the opening of a deep-seated abscess in any other region of the body, *e. g.*, in an extremity. As I understand the term laparotomy, and I am not aware that it is ever used otherwise, it means that section of the abdominal parietes is followed by an operation performed within the peritoneal cavity. If the wall of an abscess situated in an abdominal organ has become adherent to the visceral surface of the abdominal parietes, the peritoneal cavity is of necessity obliterated to the extent to which adhesions have formed. An incision made over such adhesions does not open the peritoneal cavity, and consequently the operation can not be spoken of as a laparotomy. In the paper which I pub-



lished on "Laparotomy for Periuterine Abscess," it was distinctly stated that the only way by which it seemed possible to get at the abscess was by opening the peritoneal cavity. It is also mentioned that omentum and intestines were found between the walls of the abscess and the walls of the abdomen.

Concerning the etiology of pelvic abscess, I should like to call attention to the literature of the subject. Sānger, whose statements regarding etiology I have found to be the most complete, says that one out of nine of all gynecological affections is of gonorrhœic character. He further says that fifty per centum of these are diseases of the uterine appendages; although, of course, any part of the genital tract may be primarily invaded. In the Fallopian tubes he finds that disease most often has its principal focus, where it begins and whence it spreads. He distinguishes six kinds of salpingitis: (1), septic, puerperal and non-puerperal; (2), tuberculous; (3), syphilitic; (4), actinomycotic; (5), gonorrhœic; (6), a mixed form. The gonorrhœic is the most common form of the disease, and it produces the most severe cases of pelvic inflammation. It has not as yet been proven that the gonococci of Neisser can, of themselves, produce abscesses; but destruction of the surface of the mucous membrane is sufficient; and entrance is thus given to the septic pus microbes, the *staphylococcus aureus* and *albus* and the *streptococcus pyogenes*, which are probably always present.

The invasion having taken place, we must ask ourselves by what channel does the inflammation travel? Where should we expect finally to find an abscess in case one should form? The Fellows will remember the beautiful experiments of Bitas, Koenig, Schlesinger; experiments which about three years ago I repeated in the dead-house of the Cook County Hospital, although the purpose I had in view at that time was a different one. These gentlemen injected, by means of fine canulæ, fluids, such as colored glue, into the periuterine tissues of puerperal and non-puerperal bodies. Koenig found (*a*) that fluids, injected in the region around the *fundus uteri* and uterine portion of the Fallopian tubes, first pass upward into the iliac fossa to reach the crest of the ilium, then downward toward Poupart's ligament, and finally into the *pelvis minor* or true pelvis; (*b*) fluids injected into the periuterine tissues, in the neighborhood of the internal os, first fill the extraperitoneal tissue

of the *pelvis minor*, then follow the round ligament as far as Poupart's ligament and ascend in a backward direction into the iliac fossa; (c) that when the injection is made near the lower portion of the posterior surface of the uterus, the fluid first flows into the *cul-de-sac* of Douglas, and thence rises into the iliac fossa. Schlesinger, although in the main agreeing with Koenig, differs with him in the following two points: He says (a) when fluid is injected into the neighborhood of the *fundus uteri*, it first passes into the iliac fossa, but thence it does not descend into the true pelvis, as Koenig observed, but it ascends, running up the anterior abdominal wall; (b) from the broad ligament the fluid finds its way into the iliac fossa and thence upward toward the kidney, running in the mesentery of either the ascending or descending colon. Schlesinger further makes the interesting statement that his pericervical injections filled the pericervical tissues, but that they never produced a tumor which could be felt above the *symphysis pubis*. As far as my experience goes, the results of these experiments correspond well with the clinical facts. The puerperal abscesses which I have opened were situated, two over the crest of the ilium, one on Poupart's ligament, and one on the anterior abdominal wall, about three inches above the ligament.

As before mentioned, about three years ago I made similar experiments; the fluid I employed was milk. My object, at the time, was to ascertain the exact relative position of such an artificial exudate, representing an abscess, with regard to one of the broad ligaments. I wanted to see for myself what difficulties I must be prepared to encounter in uniting the walls of a pelvic abscess, after having opened it, to the edges of the abdominal wound. As might have been expected, I found the difficulties of the operation to vary partly with the size of the exudate and partly with the degree of tension of the abdominal parietes. On the whole, the matter seemed simpler to me than I had *a priori* imagined.

Whether in cases of pelvic inflammations and abscesses laparotomy should be done or not, is a question of comparatively recent date, it being but little older than five years. As I have already said in my paper on "Periuterine Abscess," the operation is always to be regarded as a last resort, and should never be thought of in cases in which the abscess can with safety be reached in any other way, which,

of course, includes opening it through the rectum. Lawson Tait, of Birmingham, and Martin, of Berlin, were the first who attempted to prevent the terrible contingencies of pelvic inflammation by attacking the disease at its original seat; Lawson Tait removed the suppurating uterine appendages. Martin operated for suppurating periuterine hæmatocele. Tait operated for a suppurating hæmatoma of the right Fallopian tube (peritonitis) in 1878, and he removed both tubes for pyosalpinx and an ovary for abscess in 1885. In 1885 Martin performed laparotomy in three cases of intraperitoneal hæmatoma, *i. e.*, retro-uterine hæmatocele. He opened the peritoneal cavity, incised the sac, and evacuated the blood and pus; he then drained into the vagina, through the pouch of Douglas, and closed the opening he had made into the sac from the peritoneal cavity by sutures. In the discussion following the reading of Martin's paper, Kaltenbach opposed Martin's operation, and pleaded for an extraperitoneal operation, reaching the abscess either from above Poupart's ligament, or, as Hegar recommended, from the ischiorectal fossa. In 1880, Feldman, of Göttingen, published an operation for double pyosalpinx. In 1882, Baumgärtner published a case of hæmatocele in which Martin's operation had been successfully performed. These more or less sporadic operations called the attention of the profession to the subject, and already during the following year, 1883, upward of fifty or sixty cases were reported in which laparotomy was resorted to for the cure of pelvic inflammations. Aside from the forty-six cases which Lawson Tait published in his book, "Diseases of the Ovaries," he reported seven more. T. Gaillard Thomas reported five cases; Zeiss, Thornton, Baer and Proschownick, each one. In 1884, America was represented by fifteen cases; Stone, 1; Lee, 4; Lusk, 1; Martin, of Chicago, 1; Goodell, 2; Jones, 1; Thomas, 1; Dawson, 1; Polk, 3. In England we have thirty-five cases: Tait, 15, 7 of pelvic abscess; McDonald, 2; Lediard, 1; Chapman, 1; Savage, 9, 8 of pelvic peritonitis and 1 of hæmatocele; Malin, 7. In Germany, twenty-two cases were reported: Martin, 8 of suppurating hæmatocele; Gusserow, 7, in 4 of which the sac was stitched to the abdominal wound; Sänger, 5; Schröder, 1; Quetsch, 1.

It is evident that the operation rapidly gained ground, and that laparotomy has come to occupy a prominent place in the treatment of pelvic inflammations and abscesses. It

may be objected that as yet the indications for the operation are not as clearly defined as we might wish them to be; in answer to this, we can only say that the operation is new, and that we must consider the importance of the subject, the guaranty of progress in the right direction.

When a communication exists between an abscess and the intestinal tract, evacuation of the pus into the bowels is sometimes followed by spontaneous recovery. As a rule, however, such a condition is extremely dangerous, for the abscess cavity is constantly being infected with septic material from the intestine. Péan, in his "*Diagnostic et Traitement des Tumeurs de l'Abdomen et du Bassin*," T. II, p. 155, writes that a periuterine abscess may open into the cæcum, colon or rectum; that if a periuterine abscess opens into the intestine, bladder or uterus, septic infection will not fail to produce its symptoms and may speedily prove fatal. This statement may be a little too broad. Schröder, in his "*Krankheiten der Weiblichen Geschlechtsorgane*," Leipzig, 1880, says that when the abscess has broken into the gut or bladder we have to deal with a grave condition, as it is difficult or impossible to reach the abscess from the vagina. At that time, in 1880, he had not thought of the practicability of laparotomy in such cases. When the abscess has evacuated itself into the rectum, he considers it less difficult to get access to it, and he advises cutting through the posterior *cul-de-sac* of the vagina, and dissecting upward between the uterus and the rectum. Emmet writes that when an abscess opens into the rectum, the case is very much complicated by septic infection through the fæces. The quotations given are sufficient for us to conclude that, when there is communication between a periuterine abscess and the rectum, the patient is in great and constant danger of dying from septic infection, and that, therefore, an operation should be done, if possible, to provide free drainage of the abscess. In discussing my paper, Dr. W. H. Byford said that he was opposed to the line of treatment suggested by me, *i. e.*, laparotomy; that the *sphincter ani* should be dilated or incised, the communication between the abscess cavity and rectum should be dilated with the finger, a steel dilator or the knife, the cavity of the abscess scraped, washed out, and drainage effected *per rectum*.

Aside from the old, now justly abandoned, puncture of a retro-uterine abscess *per rectum*, Dr. Byford's method of attacking such an abscess is to me entirely new. I have



nowhere, in the course of my reading, met with a similar suggestion. If the abscess communicate with the intestine at a point beyond the rectum, a rectal operation is of course out of the question. If the opening into the rectum lies three inches or more above the anus, dilatation is hardly practicable. Such openings are often narrow and tortuous, the neighboring organs are immovable, and even if we divide the sphincter and the retrorectal tissues, we are obliged to work in the dark, for it is difficult or impossible to draw such an opening well down into view. The gentlemen present who have extirpated a carcinoma of the rectum, will appreciate the difficulties of operating high up in the gut.

But above all, I must earnestly warn you against adopting Dr. Byford's plan of employing in this region a knife for the purpose of dilating the opening of an abscess. Working here with a knife, we always run the risk of opening the peritoneal cavity, and of dividing large vessels which are bound in the wall of the sac, as I once demonstrated in the walls of an abscess, situated in a broad ligament. The large uterine vessels may be found anywhere, and if wounded, it is next to impossible to ligature them securely.

In a relatively small number of cases the abscess opens into the rectum near the anus; in these, dilatation may be tried, and it may even effect a cure, as we learn from Dr. H. T. Byford's case. However, we must have heard of more than one case before we can judge of the value of this method of treatment. Being somewhat enthusiastic over his rectal method, Dr. Byford disposes of laparotomy by saying, "The treatment by abdominal section can not for a moment be entertained, for at least two reasons," of which the first one is that it is necessarily followed by a recto-abdominal fistula, which is incapable of being promptly cured, and is apt to become an unfailing source of systemic infection. Of the numerous examples we have, I need but mention the perityphlitic abscesses to show that an intestino-abdominal fistula does not contraindicate the evacuation of the abscess. We operate to save life, whatever may become of the fistula afterward; besides, these fistulæ do frequently close.—*Journal American Medical Association.*

## Microscopy.

---

DR. BATTY TUKES' "handy method" of examining the fresh brain is thus: Take a piece, size of pin's head, of the morbid tissue and press on slide with cover glass. Remove cover and add a drop of dilute carmine solution, mix with the tissue and press down again with clean cover glass until translucent. The cells, nuclei and vessels take the color, and morbid conditions as pigmentary granulations of cells, colloid bodies which refuse the stain, imperfectly colored miliary bodies, will be brought to view.

---

### San Francisco Microscopical Society.

---

*Reported by A. H. Breckenfeld, Recording Secretary.*

THE regular fortnightly meeting of the local microscopical society was held at its rooms last Wednesday evening and attracted a large attendance of members and visitors.

Under polarized light were shown the resplendent rosette-shaped crystals of brucine, an alkaloid extracted from the bark of *Strychnos nux-vomica*.

A most interesting demonstration of the capabilities of the oxy-hydrogen microscope was then given by Edward W. Runyon, of the California College of Pharmacy. The lantern used by him was of remarkably compact design and of excellent workmanship. The rays from the incandescent lime were converged by an achromatic condenser of four and one-half inches diameter, in front of which was inserted a cell filled with a saturated solution of alum for the purpose of filtering out most of the heat rays, and this device was stated to be sufficient for ordinary work. When balsam-mounted slides were to be subjected to prolonged exposure, the special balsam heating rays could be further stopped by interposing two glass plates cemented together by a layer of Canada balsam. The microscopical attachment is of Mr. Runyon's own designing, and is screwed to the front of the lantern. The nose-piece, to which the objectives are attached, slides on three polished steel rods, as does also the stage with its sub-stage, and both can be clamped in any desired position. The fine adjustment is obtained by means of a micrometer screw. The objectives used in the exhibi-

tion were a half-inch and an inch by Bausch & Lomb, and also a half-inch by Gundlach. Extraneous light was excluded by means of an adjustable metal hood.

After describing the construction of the instrument itself, indicating the course of the rays through its component lenses, and alluding to its great value in photo-micrography, Mr. Runyon drew attention to the fact that while the scope of a projecting microscope was necessarily limited in some directions, it offered signal advantages in many important points over the table microscope. By the aid of the former suitable objects could be exhibited to a large number of persons simultaneously, and a lecturer or demonstrator could point out any particular portion of the preparation without the annoying uncertainty as to being understood which attended the use of the table microscope, through which the object could be seen by but one person at a time.

Mr. Runyon further stated that the best results had been attained by him when dispensing with the use of an ocular, and he therefore advocated obtaining the necessary amplification by the use of the objective alone, placed at a suitable distance from the screen. He then proceeded to project images of a large and carefully selected assortment of microscopic objects, comprising diatom preparations, double-stained vegetable sections, micro-photographs, insects and parts of insects, animal sections (stained, unstained and injected), crystals, etc. The colors of the various objects were brilliantly shown on the screen, while the remarkable sharpness of definition drew forth admiring comment. In addition to the microscopic objects, a number of photo-micrographs of diatoms, foraminifera, etc., were projected. At the conclusion of the exhibit a cordial vote of thanks was unanimously extended to Mr. Runyon for his exceedingly interesting demonstration.

---

## Gleanings.

---

SANTONIN IN AMENORRHOEA.—Walter Whitehead, F. R. C. S. Eng., F. R. S. Edin., Surgeon to the Manchester Royal Infirmary, prescribed ten-grain doses of santonin to be taken for two consecutive nights, and to be followed each morning by a seidlitz powder. No worms made their appearance, but a few days afterward, menstruation, which

had been in abeyance for several months, occurred. Santonin in amenorrhœa, and in many cases after the permanganate of potash has been tried in vain, and in chloro-anæmia, subordinate to amenorrhœa, appears to be of the most signal value. With the return of menstruation, or a discharge of blood from the vagina equivalent in effect, every symptom has rapidly subsided.—*London Lancet*.

UNCONTROLLABLE VOMITING DURING PREGNANCY CURED BY FEEDING THROUGH AN ESOPHAGEAL TUBE.—The *Philadelphia Medical News* relates the following case of Dr. Bruenniche (Centralb. f. Gynaek).: An unmarried woman with scanty, irregular menstruation, suffering severe gastric disturbance for two months, entered a hospital, and, under diagnosis of ulcer of the stomach, the possibility of pregnancy was denied. Soon after admission vomiting became so severe that all food was rejected and inanition was threatened. Alimentation by means of an esophageal tube was now resorted to, and broth—followed by cold water, before withdrawal of the tube—was first fed to the patient without causing vomiting. Milk was then administered, and no vomiting being produced, it was followed by bouillon, etc., with like favorable results. After five days an attempt to swallow food caused reappearance of nausea and vomiting, and the use of the tube was again necessitated. Pregnancy was now readily diagnosticated. In three weeks the use of the tube was dispensed with, and the woman discharged cured.

A significant fact in connection with the case is that it was only necessary to introduce the tube into the entrance of the esophagus, showing that the location of the sensitive region, irritation of which occasioned the vomiting, was situated higher up in the digestive tract than the stomach.

THE OVERGROWTH OF SURGERY IN GYNECOLOGY.—Judging from the current literature of the day one gets the impression that the whole art of gynecology is reduced to abdominal surgery, with an occasional plastic operation about the cervix uteri and perineum. The published transactions of the obstetrical and gynecological societies of the larger cities of this country are made up of great operations.

The removal of ovaries, tubes, uterus, and all forms of tumors connected with these organs, appears to be the whole occupation of those who practice gynecology. If



these specialists and their assistants condescend to treat the diseases of women which do not require heroic surgical treatment, they evidently do not consider such practice worth mentioning. There is certainly great surgical activity in this department. So much so that we are led to hope that a reaction may soon come; a change which will bring up the medical side of the subject. It is time that the knowledge, judgment and skill of the physician should receive as much attention and consideration as the daring operations of the surgeon.

In the crop of gynecologists coming up at this time, we find nearly all of them thirsting for big operations like hysterectomy and ovariectomy. It would be well if there were more who could be called physicians.

METHOD OF INDUCING LABOR.—Prof. Tibone suggests a modification of the method of Krause, which is, as is known, the introduction of an ordinary sound into the uterus, leaving it there until labor is established. Tibone's method is as follows: After taking all antiseptic precautions the cervix is brought into view by means of a speculum and then a special kind of sound is introduced. The author prefers the plain English bougie, No. 10 or 12. The bougie is held a moment in a warm mercurial solution and is gradually softened; it is then introduced into the cervix and slowly and gradually pushed up until it has entirely disappeared inside the womb. There is then placed upon the mouth of the womb a large tampon of cotton soaked in an antiseptic solution; the patient may then get up and keep about until the appearance of labor. This method is perhaps a trifle slow, but it is sure, and on account of the softness of the instrument used there is no exposure to violent rupture of the membranes or to serious injury to the placenta. The author has used this method repeatedly and always with satisfaction.—*L'Union Medicale*.

EPITHELIOMA OF THE CERVIX, COMPLICATING LABOR.—Dr. C. C. Frederick (*Buffalo Medical and Surgical Journal*) advises the following treatment of this rare occurrence:

1. When the disease is not too extensive, it should be removed early in pregnancy.
2. When the disease is extensive, it should be removed near or at the time of labor.
3. "When this can not be done, the safety of the mother

is best consulted by bringing the pregnancy to an end as soon as possible."—(*Herman*).

4. When the labor has come on, expansion of the os should be aided by numerous small incisions in its circumference, and the use of rubber dilators.

5. Dilatation of the os being in progress, and uterine action not sufficient to force the head through the cervical canal, forceps or version may be resorted to.

6. When dilatation can not take place after removal of the diseased tissues, the incision of the os and use of dilators, either from the size of the tumor or rigidity of the tissues, Cesarean section should be done.—*Weekly Medical Review*.

At a recent banquet Sir Spencer Wells told a story from his personal experience as a young man, which has in it a lesson for the older men of to-day. He had been called in the absence of Dr. Braithwaite, the family physician, to see a girl whom he found lying, insensible, on the bed. Not knowing what to do he gave some brandy and water. Dr. Braithwaite then arrived, and after examining the case ordered two teaspoonfuls more of the mixture, but as soon as he was alone with Wells, said: "It was very wrong to give her brandy and water. It is the first stage of some eruptive fever. But a teaspoonful won't make any difference, and it will show that I did not differ with you. If I had," he added with a kind smile, "perhaps they would not believe either of us." There was something in this way of treating a junior—so much good feeling, mixed with so much knowledge of human nature—which so impressed the future Sir Spencer as to influence him in his consultations with his juniors.—*Medical Age*.

**HOW TO REDUCE TRAUMATIC FEVER.**—Apply bags of cracked ice, or of ice water, or the rubber coil, across the clavicles and base of the neck, and the temperature of the large amount of blood coursing through the subclavian and carotid arteries and the jugular veins is rapidly diminished, thus causing a fall of body heat within a short time.

**SARTIN'S MIXTURE.**—For reducing cutaneous congestion in erythema, urticaria, etc.: Sulp. iron 1 dr., sulph. magnes. 1 oz., dil. sulphuric acid 2 dr., tr. gentian 1 oz., water 3 oz. Mix; teaspoonful in half glass of water after each meal.

## Book Notices

---

A REFERENCE HAND-BOOK OF THE MEDICAL SCIENCES: Embracing the Entire Range of Scientific and Practical Medicine and Allied Science. By various writers. Illustrated by Chromo Lithographs and Fine Wood Engravings. Edited by Albert H. Buck, M. D., New York City. Volume II. Large Quarto, Double Columns. Pp. 814. New York: Wm. Wood & Co. Cincinnati: P. C. Garfield. 1886.

We noticed the first volume of this very splendid work several months ago, and we now have had sent us the second volume.

The work, as we have stated, is to consist of eight volumes. With over 800 pages to a volume, the complete work will have more than 6,400 pages. But its pages being of very large size, double columns, and the type being of the smallest size consistent with being easily read, it will be perceived that there will be room for the introduction of an enormous amount of reading matter. It has been ascertained by actual count that each page has upon it as many words as are found upon three ordinary full octavo pages, the whole work, therefore, equaling in its contents twenty or more volumes of the usual octavo size.

This work, which is entitled a "REFERENCE HAND-BOOK OF THE MEDICAL SCIENCES," will embrace in its scope all the important topics belonging to the broad domain of medicine, surgery and the allied sciences. As we before stated, the subject matter is arranged alphabetically so as to admit of easy reference, without loss of time, when there is a wish to consult it. It will be found to treat in a fairly exhaustive manner all the subjects pertaining to anatomy, embryology, histology, physiology, physiological and pathological chemistry, pathological anatomy, climatology, medical botany, general pathology, therapeutics, surgery, gynecology, neurology, otology, ophthalmology, obstetrics, hygiene and public health, military and naval medicine, life insurance, medical jurisprudence, physical diagnosis, etiology and treatment of diseases, diseases of children, diseases of the mind and nervous system, etc. In fact, the work will form a medical library of itself—being an encyclopedia of medicine, surgery and obstetrics, etc., in which a practitioner

will find full information upon any topic in regard to which he may desire to inform himself. For instance, if he wishes to obtain information in regard to diphtheria he will only have to turn to the D's, and on looking among them he will come upon an article giving a full account of the history, etiology, symptoms, treatment, etc., of the disease—an exhaustive dissertation.

Dr. Albert H. Buck is the editor of this great work, but, as we stated in a previous notice, it will be written by many writers. We have not counted the names of the contributors as they appear upon a printed list, but there is certainly, over 200 of them. To each one of these has been assigned those subjects which his study and practice have particularly qualified him to treat. A large portion, therefore, of the material in this hand-book is original work, the information presented resulting from the experience, reflection and research of those who have bestowed special study upon the various topics.

The work is sold by subscription only. Those desiring it should send their names to the publishers. Price, in cloth binding, \$6.00 per volume; in leather, \$7.00; Turkey morocco, \$8.00.

---

A MANUAL OF DISEASES OF THE SKIN: Their Description, Diagnosis and Treatment. By Balmano Squire, M.B., London, Surgeon to the British Hospital for Diseases of the Skin. 16mo. Cloth. Pp. 194. Chicago: A. N. Marquis & Co., Clark and Adams Streets. Price, \$1.00.

This little work has gone through four editions in England. Its special characteristics are simplicity in the division and grouping of the subject matter, so that a clear, general view of the subject may be readily arrived at by the reader, and so that he may find his way through the volume without undue difficulty, and also may be able to turn at once to any particular disease or class of diseases respecting which he may desire information. In this latter object he is still further assisted by a copious alphabetical index at the end of the book.

Those portions of the work which refer to the identification of the various diseases, that is to say, to the means by which each of the numerous diseases of the skin may be



recognized and distinguished from other eruptions, have been elaborated with special minuteness.

The type and size of the paper have been so arranged as to bring the work down to the compass of a hand-book or manual, and to permit of its production at a moderate price. We are sure that students in attendance upon medical lectures, as well as practitioners, will find it especially suited to their wants.

---

PLAIN FACTS FOR OLD AND YOUNG; EMBRACING THE NATURAL HISTORY AND HYGIENE OF REPRODUCTION. By J. H. Kellogg, M.D., Member of the Michigan State Medical Association, The American Public Health Association, The American Society of Microscopists, etc. New Edition, Revised and Enlarged. 8vo. Pp. 644. Burlington, Iowa: I. F. Segner. Sold by Subscription. Leather. Price, \$4.00.

As would be inferred from the title, this work has been prepared for popular use, yet we have been informed by the agent that not a few physicians are subscribers for it.

There is considerable difference of opinion among medical men as regards the propriety of preparing works upon medical subjects for popular use. Some think that such books necessarily impart but a smattering knowledge of the subjects upon which they treat; and as imperfect information is generally dangerous, it is especially so as regards whatever pertains to medicine. We, however, have always maintained that the greater the intelligence of the people in regard to health and disease—the methods of securing health and avoiding disease, which would imply some knowledge of anatomy and physiology and sanitary laws—the more the profession of medicine would be appreciated, the higher would be the esteem for physicians. The densely ignorant man can not discriminate between the quack and the true physician. The boasting charlatan is looked upon by him as one of wonderful skill in the healing art. The smattering knowledge of law obtained by the masses in reading newspapers and by attending upon trials does not encourage any one to be his own lawyer, when he has an important suit in court. On the contrary, it opens the eyes of the public, enabling every one to see who are the best attorneys.

The subjects with which this work deals are certainly of

vital consequence to the human race. There are no vices so prevalent as sexual vices, and there are none of which those who indulge in them are so ignorant as to their consequences. They have votaries, not unfrequently, who would not be such if they fully understood their immorality and the penalties which follow.

The prime object of the work has been to call attention to the great prevalence of sexual excesses of all kinds, and the heinous crimes resulting from some forms of sexual transgression, and to point out the terrible results which inevitably follow the violation of sexual law. Especial pains have been taken to avoid indelicate expression; and we are pleased to find that in no part of the work is there any effort to pander to prurient curiosity. The immoral will discover nothing to encourage them. We can not help but believe that the wide circulation of the book will do much good—will afford much beneficial enlightenment on important subjects in regard to which there is very gross ignorance.

---

NINETEENTH ANNUAL REPORT OF THE HEALTH DEPARTMENT TO THE HONORABLE COMMON COUNCIL OF THE CITY OF CINCINNATI, FOR THE YEAR ENDING DECEMBER 31, 1885. C. W. Rowland, Esq., Health Officer.

Mr. Rowland, the present Health Officer of Cincinnati, although not a physician, yet being a very intelligent gentleman who has well informed himself in regard to sanitary matters, presents in this pamphlet of 129 octavo pages quite an interesting report indeed. He has quite a large number of intelligent medical gentlemen upon his staff as physicians of the outdoor poor, and they are quite able to give instruction upon subjects of hygiene whenever professional instruction is needed.

We learn from the Report that 188 deaths occurred during the year from *cholera infantum*; 90 from *scarlet fever*; 100 from *diphtheria*; 115 from *croup*; 122 from *typhoid fever*; 54 from *measles*; 4 from *whooping cough*, 28 less than in 1884; 639 from *diarrhœal diseases*; 54 from *smallpox*. From diseases termed constitutional, 1,184 deaths resulted. Of these, 855 were from consumption; 93 from cancers of all kinds. From local diseases there were 2,902 deaths. From pneumonia—both pleuro and typhoid—(we presume catarrhal pneumonia is included), there were 586 deaths.

The total number of deaths from consumption, pneumonia, bronchitis, pleurisy and congestion of the lungs was 1,765. There were 263 deaths resulting from violence—41 from railroad accidents. The total mortality was 5,973, an increase of 306 over 1884.

We wonder how many deaths each year are caused by railroads throughout the country.

---

## Editorial.

---

DEGENERATION AND REGENERATION OF THE CORPUSCLES.—Dr. Wm. Osler, in the *Medical Record*, has an interesting article upon this subject. He mentions the well-known fact that the red corpuscles in health are constantly degenerating and as constantly being reproduced, though the facts, as he states, upon which this belief is based are not very numerous. There is evidence, he remarks, that the coloring matters of the bile and of urine are derived from hæmoglobin, and to supply their daily amount many corpuscles must be destroyed, and to replace which new ones must be formed. The variations in number at different times and under different circumstances indicate that waste and repair are ceaseless processes. From the time the human being is born, or rather from the time of its conception, until death takes place after the lapse of years—from 75 to 80 or even 100, as happens now and then—the machinery of nature keeps in constant action day and night—the heart never flagging for a moment, the lungs maintaining constant action, and nutrition supplying the waste of muscles, bones and nerves. There is direct evidence, he says, in the presence of degenerating red corpuscles in certain organs, spleen, and bone marrow.

Dr. Osler mentions the fact recognized by microscopists that the red corpuscles in health present a remarkable uniformity in size. The large proportion have a diameter of  $7.5\ \mu$ , but there are a few to be found which measure a micromillimetre less or more,  $6.5$  or  $8.5\ \mu$ . These slightly smaller and larger forms are not numerous in normal blood. In the new born, and for some time after birth, the maximum and minimum diameter of the red corpuscle presents a much wider range, the variations being from  $10.3\ \mu$  to

3.3  $\mu$ . One of the most striking alterations he mentions of the red corpuscles in certain diseased states is a reversion to this embryonic or infantile condition, with a variation in the size of individual corpuscles to a degree which is truly remarkable. Instead of an extreme variation of 2  $\mu$  as in health, the range between the smallest and largest forms may be from 8  $\mu$  to 10  $\mu$ , or even more. Thus, minute corpuscles may be measured from 2.5  $\mu$  to 3.5  $\mu$ , while contiguous cells may be as much as 10, 12, or even 14  $\mu$ . To these abnormal forms, the terms *microcytes* and *megalocytes* have been appropriately given.

*Microcytes* occur normally in the blood of the embryo and new born, but are rarely to be seen in a healthy adult. In disease they are most abundant in anemia, whether from hemorrhage or as the result of changes in the cytogenic organs, or secondary to disease of important viscera. It was once supposed that these bodies might be of diagnostic import in certain forms of anemia, but it is known that they occur in all forms, in chlorosis, splenic anemia, pernicious anemia, leucæmia, Hodgkins' disease, and in the anemia of cancer, phthisis, and other chronic affections.

Dr. Osler states that there is unfortunately a difference of opinion as to the nature and origin of the *microcytes*, some regarding them as disintegrated remnants of corpuscles, others as young forms, in process of development. That they may result from changes in the ordinary red corpuscles is, he thinks, certain. He has frequently noticed that they appear to increase in a slide kept for observation. In a freshly prepared slide of anemic blood, he has noticed that firm pressure on the top cover will sometimes be sufficient to produce a large number of *microcytes* which result from the destruction of the red corpuscles by pressure. They may, indeed, be observed in process of formation.

The *megalocytes* have attracted less attention than the smaller forms, but are equally curious. The term may be applied to forms above 8.5  $\mu$  or 9  $\mu$  in diameter. They may reach an extraordinary size, 12, 14, and even 15  $\mu$ . They are very constant elements in cases of pernicious anemia, and also occur in chlorosis and lukæmia. Dr. Osler has been able to confirm the observation made by Gram that they occur in cases of icterus. These *megalocytes* often show the most eccentric changes in outline.

Normal red corpuscles are known by all observers to be very regular in outline, but in the various anemias the loss



of this character is a very distinctive feature. The term *poikilocytes* has been very generally applied to them. The most remarkable shapes are sometimes presented, as ovoid, elongated, pyramidal, balloon-shaped, with indented edges, or rods straight or bent at right angles. Many of these bizarre forms are scarcely recognizable at first as red corpuscles. Although more commonly met with in an extreme degree in cases of pernicious anemia, they also occur in the anemia of cancer, phthisis and inanition. It is a physical change depending probably upon alterations in the blood serum.

In anemic states, Dr. Osler says in his article, there may be present in blood *nucleated red corpuscles*, such as normally occur in the blood of the embryo, and such as are present in the red marrow of the bones, but he has not met with them in all cases of profound anemia. He has met with them in leucæmia in larger numbers than in any other state.

A very rare and odd element in the blood, says Dr. Osler, is the *corpuscle containing red blood-corpuscles*. Several observers have noticed the presence of red cells inside colorless corpuscles in the circulating blood. Considering the abundance, he says, of these cells in the marrow, spleen, and lymph glands in certain states, it is surprising that we do not find them more often in the blood. It is quite possible, he observes, that the colorless corpuscle circulating in the blood may itself take up a red cell into its interior, just as it may an oil-drop or a particle of pigment. He states that he has a sketch of a colorless corpuscle of the blood of a frog, with three or four human red corpuscles in its interior which it had *eaten*.

The observations of the past ten or twelve years have led us away from the old view that the red cells are derived from the colorless corpuscles.

---

A NEW AND REMARKABLE DISCOVERY.—We make use of an article in the *St. Louis Medical and Surgical Journal* by the able editor of the Microscopical Department, Frank L. James, Ph.D., M.D., in relating the facts of a new discovery, which will certainly bring about a new era in Microscopy.

Professor Abbe, of Germany, who was the inventor of the homogeneous microscopic objectives, which have so very greatly extended the efficiency of the microscope, has

discovered a new vitreous compound for the construction of lenses, having certain characteristics which remove the obstacles that have of late stood as a bar to further progress in the manufacture of high power objectives—obstacles inherent in the flint and crown glass of which objective lenses have hitherto been constructed.

The St. Louis editor says that Professor Abbe, in a work entitled *Die Optischen Hulfsmittel der Mikroskopie*, states that while, even with the resources actually at our command, we may yet hope for an important progress in the construction of objectives, still the greatest of advances is to be looked for in the discovery of some lens material having qualities not possessed by flint or crown glass (and impliedly, devoid of the defects of these materials). "Unhappily," adds this great authority, "we can hardly hope that the glass-making industry will go to the expense of making experiments which will lead to the much desired end."

But the pecuniary sacrifices which were too great for individual enterprise to undertake, we learn, have fortunately been assumed by the German Government, which placed at the disposal of Dr. Zeiss, of Jena, a sum of money equal to about \$10,000 for this purpose. The house of Carl Zeiss added the balance which was necessary, and a series of experiments was inaugurated which resulted in the great discovery to which we have alluded.

To give an idea of the progress made possible by the discovery of this new glass, the *Journal* cites what has already been done with it in the first hours, as it were, of its nativity. Hitherto the shortest eyepiece, in ordinary use, has been the D, or half-inch focus eyepiece, which, while it gave a great amplification, did so at the expense of light, and was exceedingly fatiguing to the eye. Of the two eyepieces constructed by Zeiss from the new material, one has a focal length of two-fifths and the other three-fifths of an inch, and, as declared by Dr. Van Heurck, both give a great quantity of light, and besides, by their peculiar construction add to the definition of the objectives. This means an increase in amplification of about 20 per cent. over that attainable with the half-inch eyepiece, and without the hitherto corresponding loss of light and definition.

Certainly the scientific world will owe a great debt of gratitude to the German Government for its great generos-

ity in giving such a magnificent sum of money for making experiments through which such grand results have been evolved. We suppose, along with the *Journal* editor, that, of course, the results having been attained largely through the aid of a government subsidy, the present possessor of the secret composition of the new glass will make its constituents and mode of manufacture known to the world, thus enabling all to take advantage of it.

Dr. Van Heurck, director of the Auvers (Belgium) Botanical Gardens, communicates to the *Journal de Micrographie* the results obtained by him in his recent critical examination of an objective and three eyepieces placed in his hands by Carl Zeiss, of Jena, made by a new formula out of this new glass. We copy the translation of this article as it appears in the *St. Louis Medical and Surgical Journal*.

"The objective is homogeneous immersion, of a focal distance of 3 mm. or about one-eighth inch, English measurement. It is not arranged for coverglass correction, as this is not necessary, that function being attained by means of the sliding tube of the body. It contains five lenses, and has a numerical aperture of 1.4, which is a trifle less than has been obtained in England and America (1.5); but so far as its optical qualities are concerned it is far superior to anything ever before made, the new glass permitting the absolute correction of all aberrations. The field is perfectly flat, the minutest object in the extreme edge of the field showing as sharply and clearly as though it were in the exact center. With the vertical illuminator an amphipleura (silvered) is resolved into pearls—not merely in spots, but over the entire frustule, and with such clearness that these pearls can be counted. In the study of other diatoms I have found details which have hitherto escaped notice. As to the bacteria, details of structure are shown that have never before been seen—details that will without doubt serve to differentiate them by ocular means. Accompanying the objectives are three eyepieces, two for direct use and one for photography. They are also made of the new glass and by entirely new optical formulæ. Of the details I am ignorant, because they are made so that they can not be opened. I can only see that there are two diaphragms in each, and that these are separated from each other by a considerable distance (*notablement ecartes*). The amplification of these eyepieces is enormous, one having a focal length of 10 millimeters and the other of 15mm. ( $\frac{4}{10}$ )"

and  $\frac{6}{10}$ "), in spite of which they give a great quantity of light and do not tire the eyes. The maker states that the remarkable flatness of field displayed by the objective is due largely to the construction of the eyepieces. The results of photomicroscopic trial of the *oculaire de projection* are equally remarkable. It destroys the chemical focus of the objective and at the same time gives an image of a clearness and fineness hitherto unattainable."

---

INTESTINAL OBSTRUCTION.—Dr. H. Illoway, of Cincinnati, whose translations from French medical journals have appeared in almost every issue of the MEDICAL NEWS for the last two years, is author of a most interesting article, entitled as above, in the January issue of the *American Journal Medical Sciences*.

Intestinal obstruction, as is well known, is a most serious condition, and, if not relieved, will be followed by speedy death. Various methods have been employed to overcome the obstruction, as the administration of purgatives, opium, etc. Dr. Illoway, however, demonstrates that the only proper and reliable means are to be found in the use of injections of water, or in the operation of laparotomy. He is of the opinion, and we agree with him, that a large proportion of the fatal results that have followed upon opening the abdomen for the relief of intestinal obstruction has been due, not to the wounding of the peritoneum, or to the operation, in any way, *per se*, but to the lateness of its performance. Injections, in many cases, in order to be effectual should be performed with a syringe or force-pump that will carry the fluid beyond the ileo-cecal valve into the small intestines. This, he shows, can not be done by attaching a long tube to the syringe. He quotes from Treves, who asserts that, notwithstanding the statements of various writers that a flexible tube may be passed up the descending colon to the transverse colon, and even on into the cecum, yet, in fact, it never progresses further than the sigmoid flexure. But with a properly constructed force-pump there is no doubt that a fluid can be passed through the whole length of the intestinal canal.

Dr. Illoway reports a number of cases that came under his observation of intestinal obstruction, and he feels convinced, from his experience, that, in a large number, prompt relief will be obtained by forcing water, preferably that of 100° to 106° F., through the divisions of the colon,



past the ileo-cecal valve, into the small intestines—and continuing this until the patient feels himself “to be pumped full.” If, however, the obstruction does not promptly yield to this treatment, then laparotomy should be performed without delay. The doctor relates the case of a young girl, aged 13, whose life he considers to have been needlessly sacrificed because her parents, with an obstinacy “born of ignorance and stupidity,” would not consent to the operation of opening the abdomen. A post-mortem examination revealed a knuckle of the ileum passed through a slit in the omentum and bent upon itself. A slight snipping of the omentum would have been all that would have been required to relieve the abnormal condition.

Dr. Illoway's conclusions are as follows:

“1. Enemata are superior to any other method of treatment.

a. In the rapidity with which the cases are relieved.

b. And in clearly indicating whether a surgical operation will be required.

2. They are entirely safe and free from all danger, and in no way prejudice the case should a surgical operation become necessary.”

We regret that our limited space will not permit of a fuller outline of Dr. Illoway's interesting operation. We have no doubt that the adoption of his plan of treatment would not only save many lives, but would relieve an abnormal condition that has always been looked upon as a most serious one, of a great deal of its gravity.

---

DEATH OF DR. B. S. LAWSON.—Dr. B. S. Lawson, the oldest physician of Cincinnati, being in his eighty-second year, died Wednesday, April 7th, at 10 o'clock A. M. He was a gentleman of high standing in the community, and was greatly esteemed by his professional brethren. He was one of the founders of the *Cincinnati College of Medicine and Surgery*, and held the Chair of the Principles and Practice of Medicine in that institution for many years, or until the feebleness of bodily health brought about by the weight of years compelled him to resign. His colleagues parted with him with regret. His name is upon the diplomas of many physicians of the West.

A meeting of the medical profession of Cincinnati was called on Saturday, April 10th, to take action in regard to the decease of the veteran physician.

Dr. J. H. Tate acted as Chairman and Dr. J. H. Buckner was chosen Secretary. Speeches, paying tribute to the valuable life-work of Dr. Lawson, were made by Dr. Comegys, Dr. W. W. Davis, Dr. Amick, Dr. O. E. Davis and Dr. W. H. Taylor.

The committee appointed to draft resolutions reported the following, which was unanimously adopted:

"The medical profession of the city is brought together to-day by the sudden departure, to the better land, of the oldest and one of the most reputable physicians of our city.

"Dr. Lawson came to Cincinnati from Virginia when quite a young man, received his medical education here, graduated from the Medical College of Ohio in 1830, and was for awhile house physician at the Commercial Hospital. He afterward engaged in the active duties of his profession, and for a long time enjoyed an extensive and lucrative practice, inspiring the confidence of his patients, the warm regard of his friends and the respect of the entire community.

"Dr. Lawson was for twenty years a teacher of medicine in one of our colleges, and there are many pupils scattered up and down our great valley who remember well his tall form, and will cherish his memory.

"For more than fifty years this man has walked among us, fighting the battle of life and discharging the duties of a high and noble pursuit; often in perils by night, in perils by contagion, in perils by epidemics—always on the side of God and humanity; blending sweetly together the spirit of his religion and the genius of his profession; and when at last the aged warrior has laid his armor down, no blot is found on his hemlet or rust on his mail.

"*Resolved*, That we part from this venerable brother with sentiments of profound regret.

"*Resolved*, That our sympathies are extended to the family of the deceased in this time of sorrow and bereavement.

"*Resolved*, That a copy of these resolutions be published in the city papers and medical journals, and a copy be presented to the family of the deceased."

---

CLINICAL NOTES.—The following appears in the *New England Monthly*, of April:

Prof. Wm. Judkins, of Cincinnati, is quite an enthusiast on the use of colorless Hydrastis. He obtains the best of

results by using it in full strength for an ulcerated cervix, saturating a tampon of absorbent cotton, and applying through a bivalve speculum. He allows it to remain *in situ* for twenty-four hours, when the patient can by gentle traction remove it. Afterward, every twenty-four hours, she injects one ounce of the preparation to one pint of warm water. He recommends the introduction of the tampon twice a week.

Equally good benefits have been derived from the use of the drug in his hands, in the treatment of chancroids and chancres, applying with a cotton mop full strength. As an injection in gonorrhea, one drachm to one ounce of distilled water, in combination with zinc and acetate of lead, one grain each to one ounce of water, the results have been most satisfactory—acute and chronic cases yielding to the treatment in a remarkably short time, compared with former modes of treatment.

It is only of a very recent date that the objectionable coloring matter contained in hydrastin has been removed. This has been successfully accomplished by Prof. J. U. Lloyd, of Cincinnati; and we have a clear transparent solution that can be used with impunity as regards staining of the linen.

Dr. Judkins states that in a short time a paper is to appear from the pen of Prof. Roberts Bartholow on physiological experiments with this preparation of Prof. Lloyd, which will be of great interest to the profession.

---

PASTEUR ON HYDROPHOBIA.—The total number of cases that have now been treated for the prevention of hydrophobia amounts to 350. The first 200 of the cases appear to have been submitted to the preventive inoculations more than two months ago. M. Pasteur asserts that statistics prove that in the majority of cases of hydrophobia in man, the disease develops within sixty days of the receipt of the bite of a rabid animal. Consequently he claims that his treatment has been most successful, seeing that not a single case submitted to him within a reasonable time after the bite has developed any signs of hydrophobia. We confess that such a conclusion is in every way reasonable. It is reasonable, not so much from the statements as to the time, as from the circumstance that so large a number is dealt with. It appears to be inconceivable that of 200 cases of certified bites from rabid dogs not one should be followed

by hydrophobia, if the treatment be not assigned as the cause of the immunity. We could explain away the immunity if only a few cases were concerned, but hardly, we think, where so large a number of individuals have been bitten more than sixty days before, and yet without any becoming the subject of hydrophobia. Only one case, which Pasteur unwilling treated, has succumbed to the disease. This was the case of a girl who had been bitten thirty-seven days before he saw her. Symptoms of the disease appeared ten days later, and, if the case proves anything, it goes to support M. Pasteur's opinion, for the fatal result occurred well within the period above mentioned as the most probable time for the appearance of the disease. In science, and especially in medical science, caution at all points must be exercised; but if the success hitherto achieved by the Professor be maintained and strengthened by the further experience of a few more months, the method will prove a boon to humanity, a gain to science, and justly merits the applause of the human race. M. Pasteur has announced his intention of endeavoring to overcome diphtheria by measures similar to those adopted against smallpox and hydrophobia.—*Lancet*.

---

**SYPHILITIC PSEUDO-PARALYSIS.**—Parrot was the first to describe this obscure trouble, and M. Dreyfous has recently published an exhaustive monograph on the subject (*Revue Mensuelle de Méd.*). The disease presents itself as an absolute paralysis, flaccid, more or less extensive, but limited to the extremities. There is no loss of cutaneous sensibility, and electro-muscular reaction remains. There is marked pain and a more or less apparent tumefaction of the extremities of bones. It is rare for one extremity only to be affected; generally there are two; the paralysis is symmetrical, affecting the arms, more rarely both legs. When the legs are affected, one of the arms soon becomes paretic; rarely all four limbs. It always remains confined to the limbs, however. Its onset is insidious, latent and unaccompanied, at any time, by fever. Occasionally, other manifestations are visible. The progress of the disease is variable, but it is almost always fatal. M. Dreyfous recognizes three forms of the trouble: where syphilis is known to exist, where it seems to have a traumatic origin, and where syphilis is not formed nor any traumatism. It is in this last class that they are apt to be taken for cases of infantile paralysis. The trouble



has been noted as early as birth and as late as two or three months. Prognosis is always grave, more so in case the child can not obtain the best hygienic conditions, combined with a high grade of nutrition and efficient mercurial treatment.

---

PREVENTION OF TYPHOID FEVER.—We have received from the *Michigan State Board of Health* a circular of six pages, entitled as above, giving practical information in regard to the methods of preventing typhoid fever. The Board advises that immediately on the appearance of this disease, a careful examination should be made of the surroundings of the house, and particularly of the source of water used, to determine, if possible, whether it has been contaminated by leachings from privies or other sources of filth. If the sick person has been at home, and not away where the disease might be contracted, it will be safest that the water used by the sick person immediately before having been taken sick should not be used again for drinking or culinary purposes, unless it is boiled. It is believed that thorough boiling will destroy the germs or poison of the disease. Ordinary filtering will not do.

In another paragraph it is stated that as typhoid fever is seldom, if ever, transmitted directly from one person to another, strict isolation is not necessary or important in preventing its spread. It would be wise, however, for all who can properly do so, to keep away from the premises.

For disinfecting the *contents* of privy vaults it is recommended to use four ounces of the best "chloride of lime" to each gallon of material in the vault.

---

LACTOPEPTINE.—We have used this article for some time in cases of indigestion, and can recommend it as a valuable remedy. Being a compound of the five active agents which are contained in the process of digestion, it can not fail to aid the system in preparing the food for assimilation. It is an invaluable remedy in the summer diarrhœa of children. Owing to its great impairment of the vital forces, and feeble powers of the digestive tract, food frequently irritates and increases the difficulty. For such cases we learn of no agent in the *Materia Medica* as reliable as Lactopeptine.—*Cal. Med. Jour.*

# THE CINCINNATI MEDICAL NEWS.

VOL. XIX. No. 221.  
Old Series.

MAY, 1886.

VOL. XV. No. 5.  
New Series.

## Original Contributions.

### Astigmatism and Its Relation to the Use of Optical Instruments.

BY ERNST GUNDLACH, ROCHESTER, N. Y.

[Read before the Section of Microscopy, R. A. S.]

ASTIGMATISM is a defect of the human eye which disturbs the true or normal vision in such a way that, for instance, a point appears elongated in one direction, or rather it appears in a line. It is caused by a certain irregularity in curvature of one or both surfaces of the crystalline lens of the eye; that is, the surfaces are stronger curved in one direction than in another, thus giving the crystalline lens different focal lengths in different directions, so that, for instance, a line may appear sharp and distinct in one direction, but become quite blurred if the direction is changed. Astigmatism can be corrected by glasses one or both surfaces of which are of a convex or concave cylindrical curvature, and if beside this defect, the eye is either short or far sighted, a certain combination of such cylindrical curvatures and their axial directions, concave or convex as the case may require, will at the same time correct both defects and make objects appear as they do to the normal eye. Indeed, such glasses are made as spectacle glasses with complete success, but, however, the determination of the correct formula for the proper construction of such glasses requires a rather complicated and systematic examination of the defective eye, which can only be accomplished by a specialist thoroughly familiar with this branch of science. Astigmatism is very common,

and even the healthy eye is not free from it. The curvature of the crystalline lens is a little shorter in vertical than in horizontal direction, thus making a line of a certain length appear shorter when seen in horizontal and longer in vertical position, provided the distances in both cases are equal. Although the disturbance of clear and distinct vision may not be directly perceptible to the healthy eye under ordinary circumstances, it will become quite apparent if the pupil is unusually enlarged, as is the case in the dark, and the eye is directed to an isolated object the light power of which is not sufficient to cause much reduction in the size of the pupil by contraction. In cases of a high degree of astigmatism the prismatic colors will appear at the edges of objects in certain directions, according to the direction of the astigmatic axis, and add to the indistinctness.

Having thus given a brief account of the nature of astigmatism and its interfering influence to the perfect and natural use of the eye, and the remedy of the defect of the same by the use of spectacle glasses of peculiar construction, it remains to consider the relation of the astigmatic eye to the use of optical instruments.

The telescope and the microscope serve to increase the power of the eye, not only by simply showing us an object on an enlarged scale and with a wider angle of view, but also at the same time—by means of increased quantity of light—enabling us to distinguish shades of color or close lines at a smaller angle of view than the unaided eye is capable of doing. This latter property of the optical instrument we call resolving power. It is dependent on the angular aperture of the instrument and is directly proportionate to it. It gauges the distinguishing capacity of our eye to an extent which it has no opportunity to develop under ordinary conditions. In other words, the telescope and microscope not only increase the angle of view, that is, magnifying the object, but also the angular aperture, and consequently the resolving or separating power of the eye. To those unacquainted with the use of optical instruments the amount of magnifying power may seem to be the most important, if not the only, condition of the capacity of the instrument, but the experienced manipulator knows too well that high magnifying power is of no value without a corresponding amount of resolving power. A telescope of six inches' aperture will separate a double star that a two-inch glass is incapable of showing any trace of separation in, even

though both instruments are of the same magnifying power. The difference is due alone to the fact that the six-inch glass increases the angular aperture of the eye three times more than the two-inch. The principal endeavor of the optician in constructing optical instruments is not the highest possible magnifying power—indeed, there is no special difficulty in this direction—but to combine with a given magnifying power such high angular aperture with a minimum of optical errors so as to increase the resolving power to the highest possible degree, so that the closest lines or dots can be seen distinctly separated from each other. But any optical instrument, however perfect it may be in its construction, will fail to perform to the satisfaction of even the most experienced operator, if his eye is optically defective in such a way as to interfere directly with the normal performance of the instrument, and astigmatism must be regarded as such a defect. Near and long sight are corrected by simply focusing the instrument. But on our present instruments there is no means provided to correct astigmatism. The astigmatic microscopist may fail to separate some close and fine lines, which the day before under more favorable conditions to his astigmatism he saw quite distinctly; and, on another occasion, he perhaps experienced a similar change within a few minutes without any change in conditions except that he accidentally changed his own position to his microscope by a turn of ninety degrees around the table, thus placing his astigmatic axis in a more favorable or unfavorable direction, as the case may be, to the direction of the fine lines.

The telescope as well as the microscope shows the errors produced by astigmatism. Close double stars appear different in the angle of separation at different times, or at times become too indistinct to be separated at all, owing to the change of their line of position to the astigmatic axis of the observer's eye. Circular objects, such as faint clusters, nebulae and comets, appear elongated, winged, or in other way of irregular shape. In fact there is not a case possible where astigmatism could not be to some degree injurious to the perfect definition of the fine details of an object, and this is increased the higher the perfection of the instrument.

Having thus explained the general injurious effects of astigmatism on telescopic and microscopic observations, it remains to find a suitable remedy, and, as such, I propose a most simple and effective one in the use of an eyepiece of an asymmetric form so as to just neutralize the asymmetry of



the crystalline lens of the eye. This can best be done by making the outer surface cylindrical instead of spherical or plano. It may be made either concave or convex as the requirements of the case may demand. The eyepiece must be constructed with special regard to the purpose, so as to place the asymmetric surface in such close proximity to the eye that no perceptible secondary distortion is produced by the oblique direction of the eye toward the edge of the field, and, at the same time, the prismatic colors dispersed in the direction of the astigmatic distortion must be neutralized.

I intend to construct such eyepieces, and expect to start with a one-inch. To enable the applicant, for this special purpose at least, to be his own examiner for astigmatism, I intend to furnish with the eyepiece three eye-glasses, alike in mounting, but different in the degree of asymmetry, for selection. The difference being such as to practically approach both limits of common astigmatism, and the one of the three lenses nearest in asymmetry to that of his eye will correct his astigmatism to an undisturbing minimum. The observer will then have to test all the lenses, beginning with the weakest, on a suitable object, slowly revolving the eyepiece until its best position is found. Mark this position, and do the same thing with the other lenses. After this, compare the action of the lenses, each in its best position, to find the one best fitted for the eye. Of course the eyepiece, or rather its asymmetric eye-lens, must then always be used in the same position to the astigmatic axis. To do this there will be no difficulty when using the microscope, but for the equatorially mounted telescope a special contrivance may be required, so that the position of the eyepiece may be easily controlled in the dark by the fingers and corrected after each change of the position of the body.

---

F. HOPPE SEYLER, in the *Zeit. Physiol. Chem.*, states that a soda soap exists in the serum of blood and of chyle, and that it may be obtained by precipitation with alcohol and subsequent evaporation at a low temperature. Blood serum of the ox, horse, and dog contains 0.05 to 0.12 per cent. of the fatty acids of soap; human chyle 0.23 per cent. of soap and 0.723 of fat. Blood serum in a case of pneumonia contained 0.662 fatty acids of soap. The origin of soap in these fluids has not as yet been accounted for.

## Etherization by the Rectum; Report of Four Cases by Yversen's Method.

BY JOHN S. MILLER, M.D.

Read before the Philadelphia County Medical Society.

Reported for the *MEDICAL NEWS* by Henry Leffmann, M.D., Reporting Secretary.

I DESIRE to report four cases of etherization by the rectum, a method of producing anæsthesia first suggested by Dr. Axel Yversen, of Copenhagen.

These cases were in my recent practice; and to Dr. Louis Jurist and A. B. Hirsh I am indebted for assistance rendered, and for many of the observations made. In two of these cases the mucous membrane of the bowel was prepared for its respiratory function, as it ought to have been in all, by a restriction of diet and the use of purgatives. No preliminary hypodermics were used. The method of administering the ether was simple. A definite quantity was placed in a bottle (only partially filling it), was vaporized by a water-bath at  $120^{\circ}$ , and the vapor conducted to the rectum by a rubber tube, terminating in a recurrent catheter, the free or recurrent end being closed by pressure of the thumb during the inflation of the bowel; the expiratory act was performed by removing this pressure, and removing the water-bath.

The first case was one for minor operation, demanding only primary anæsthesia. This patient had not been prepared, and sufficient precaution was not taken against the introduction of ether vapor in too great a quantity, and of liquid ether, by an overboiling in the apparatus. Almost immediately he complained of burning and tenesmus, the abdomen became promptly and greatly distended, and there were colicky pains. In about one minute he noted the taste of ether. A portion of the vapor was allowed to escape, and no more was given. The pain ceased, intoxication soon began, and in six minutes he was sufficiently anæsthetized for operation. The pulse was full, and respiration was easy. Two minutes later he returned to consciousness, but seemed dazed. The struggling had been trifling. There was no vomiting, and no diarrhœa followed. One ounce of ether was used.

The second patient was an adult male, from whom I re-

moved an exostosis of the vomer—an operation requiring full anæsthesia. In this case a sufficient laxative had been given the previous night. Two hours before the operation he had been allowed an ordinary breakfast. This patient, too, experienced a prompt burning and discomfort in the rectum, but at no time great, and soon ceasing. Ether was tasted in about two minutes, and noted on the breath. The abdomen seemed distended and some cramplike pains were experienced. A considerable amount of vapor was then allowed to escape—with instant relief. After waiting two minutes without the development of further phenomena, a somewhat less amount of vapor was introduced, and (the catheter being withdrawn) was left for gradual absorption. The stage of excitement was short, marked by a pleasant delirium, and without motor activity. Full anæsthesia was obtained in eleven minutes from the first introduction of the ether vapor, and was perfectly maintained during the eight minutes of operation. Escape of the residual vapor was secured by a gentle kneading of the abdomen and separation of the nares. The posterior nares not having been plugged, considerable blood regurgitated from the stomach after operation. This vomiting can not, with any certainty, be attributed to the ether. No diarrhœa followed. An ounce and a half of the anæsthetic was used.

The third patient, also an adult, robust male, was subjected to acupressure of the internal saphenous vein, with destruction by means of Vienna paste of several neighboring vessels—an operation also requiring full anæsthesia. He had received a laxative the day before, and an enema on the morning of operation, and had taken a moderate breakfast. The sensation of warmth and tenesmus was immediate, but soon ceased. The abdomen became distended, and he complained of epigastric pain. A partial escape of vapor was permitted, and he had instant relief. A few minutes later the bowel was again inflated, and the tube withdrawn. Enough vapor remained after withdrawing the tube, to produce complete anæsthesia in a total of fifteen minutes; and no further introduction was required to maintain it. There had been almost no stage of excitation, and that with no other phenomena than an immoderate laughing. He recovered promptly. No vomiting or diarrhœa followed. A little less than two ounces of ether were used.

The fourth case was that of a medical gentleman in good

health, whose love of science led him to volunteer a passive part in these experiments. This time the bowel had not been prepared, although an ordinary movement had taken place five hours previous. On introducing the vapor there was slight burning and tenesmus, but no cramps. Intoxication was soon induced, and the doctor seemed most of all to enjoy the proceedings. Pulse and respiration were normal. A lively peristalsis now put an end to this mode of administration, and terminated the experiment.

The only reason for quoting this case, is the evidence it furnishes for the necessity of preparing the bowel—a necessity which excludes this method of etherization from our resources in accident and emergency cases.

This case completes the four, and I have had no other opportunities for observation.

Some question having arisen, as to whether the vapor really does pass the ileo-cæcal valve, I deemed this a subject for legitimate vivisection; and etherizing a cat per rectum, opened the abdominal cavity, and noted that the small intestine was as greatly distended as the large.

In this method of etherization the most obvious advantages are as follows:—

1. Dyspnœa is avoided, and the patient is saved from the anxiety due to a sense of impending suffocation.

2. There is avoided the danger of simultaneous irritation of the superior laryngeal and pneumogastric nerves at the periphery—these irritations neutralizing each other in the respiratory center, and suspending respiration entirely.

3. The danger of asphyxia is lessened—the patient not being drowned in his own mucus, and the integrity of the pulmonary mucous membrane as an organ of gas exchange, is preserved. Of course some vapor finds itself in the lungs, and acts there as a local irritant—elimination being by that channel. But the quantity is not great, and does not constitute a source of danger. In the cases reported the increase in secretion was too trifling for discovery.

4. The stage of excitation is therefore not prolonged by the struggles for breath. In general it may be said that the delirium of any alcoholic intoxication is a pleasant and good-natured one, unless the patient is crossed—as he certainly feels himself to be when a wet towel is pressed over his face.



## DISCUSSION ON ETHERIZATION OF THE RECTUM.

Dr. O'Hara: I do not think I would use this method. I see no advantage in it over administration by the mouth. It involves more risks. The ether has to go through the portal circulation, and penetrate in that way through the entire system. A good deal of local irritation will be produced, and the method might be followed by congestion of bowel. For operations above the mouth and throat it may possess advantages of convenience over the ordinary method, but a case of harelip operation has recently terminated fatally.

Dr. Levis: I have had no experience in this method, but I have watched the progress of it. The main objection is the irritating quality of ether. Other anæsthetic vapors are not so irritating, and it might be well to try the action of some of these.

Dr. Nancrede said: Although I have had no experience in the rectal method of inducing anæsthesia, yet I fully recognize that the ordinary methods of administering ether are unsatisfactory, and therefore I welcome the paper of the evening as a step in the right direction, *i. e.*, the endeavor to discover some more satisfactory method of inducing anæsthesia. The rectal method, however, is infinitely less safe than by the mouth; one, if not more, death having been acknowledged in a few dozen cases—probably less than twenty-five patients in all having been experimented on—while about one death in 23,000 was the mortality usually given for etherization by the air-passages. The rectal method evidently requires much more skill and special training than the ordinary method. Anæsthesia I always considered a dangerous state, and I think that the usual custom in our American hospitals of entrusting the administration of anæsthetics to the junior member of the house staff, is a reprehensible practice. Instead of giving the anæsthetic into the hands of the least experienced resident, it should be entrusted only to the most experienced.

Dr. Davis: In etherizing there are two things I am afraid of, suffocation and collapse. The former is usually readily avoided by attention to the tongue and the use of a gag to open the jaws; the latter is more serious—it occurs most readily in strumous children. In the University clinic there are constantly being performed operations on just such cases, résections and the like. In these strumous cases,

particularly if the operation is a severe one, the depression is very marked. I have seen the temperature fall as low as  $94^{\circ}$ , recovery ensuing. If collapse threatens, the first thing to do is to withdraw the ether. If it is being administered by the mouth this can readily be done, but not so if it is being given by the rectum. In one of the cases related by the author, anæsthesia continued for a time after the withdrawal of the anæsthetic, and this is just what is to be feared in this method of giving ether. If symptoms of collapse supervene we can not withdraw the ether from the bowel, and the anæsthesia must increase with a possibly fatal result.

Dr. Albert H. Smith: The cases offered by Dr. Miller are not sufficient to establish the advantage of this method. Perhaps in operations requiring but a few minutes, the method may answer, but how about cases in which the administration must be kept up for an hour or more. Anæsthesia is always to be considered a dangerous condition, but there is no special danger in a short anæsthesia if the material used is pure and carefully used. I can not see any advantage in the rectal method. There is a serious æsthetic objection to it. In operations about the mouth it may be convenient, but here we can use other anæsthetics. I do not think that there is any difference in the action of the ether in the two methods. The ether must always act through the nerve-centres. The difficulties of dyspnœa and irritation may be all avoided by the use of morphia hypodermically before the operation. In reference to the relative danger of ether and chloroform I may say that I have seen much more alarming symptoms from the former than from the latter. I have abstained from using chloroform in many cases, not because I thought it unsafe, but because I knew that if death occurred under its use, the anæsthetic would be made to bear the blame, while if ether were used it would not be charged with the accident.

Dr. W. R. D. Blackwood: To my mind the method is useless and objectionable. The mortality directly attributable to its employment is enough to prohibit the practice. I have no experience in the human subject yet, and would not have hereafter. I was asked to notice the subject in a medical journal, and made two experiments in order to learn something of the method. In one case the animal's abdomen was enormously distended, and the vapor *could not be removed* by simply affording free exit by a tube per anum, nor by auxiliary external pressure; the vapor undoubtedly

got beyond the ileo-cæcal valve and was retained. We know nothing about the ability of the rectum to absorb gases; that is not its function. We can not control retained vapor in the bowel; the procedure is dirty, offensive to all and unjustifiable. Like all new things, too many in the profession will run wild over this plan for awhile, and then drop it for the last novelty, without regard for its utility or real worth.

Dr. Miller, in closing the discussion, said: The design of this paper, which I had supposed obvious, is the contribution of certain data to the subject of rectal etherization, and a formulation of the more obvious advantages and disadvantages. The attempt to strike a balance of the same I deem as yet premature. The mechanical dangers of over-distension, the difficulty of emptying the bowel of vapor, when a suspension of the anæsthesia is desired, and the greater caution needed in the administration—all these points I had already mentioned in my paper.

There are only two points to which I would further allude, viz.:

First, as to rate of elimination: This taking place by the lungs, no matter how introduced, would be more rapid than when the agent is inhaled, inasmuch as by the new method the pulmonary mucous membrane is preserved intact, and therefore more capable of osmotic function than if bathed in mucus, as by the ordinary way.

A more serious objection has not yet been referred to—one based upon theoretical considerations. The experiments of Paul Bert—now already classic—have demonstrated:

1. That the degree of anæsthesia depends, not upon the absolute amount of the agent used, but upon the percentage in the blood, and therefore on the tension of the vapor in the *atmosphere inhaled*.

2. That the percentages needed to suspend respectively the functions of animal and organic life bear a definite ratio to each other—a ratio constant for each of the known anæsthetic agents, and for each species of animal and each human individual. All between the two percentages mentioned is termed the *manageable zone*.

3. That most, if not all, the undesirable effects of an anæsthetic are due to leaving this zone.

4. That the greatest safety is therefore in mixing the gases beforehand—as has long been done by Mr. Spencer Wells.

If now ether be given by the rectum, it will be readily

seen that the gauging can only be by absolute quantity, and not by the percentage actually in the blood. We could never know how near this zone is to being exhausted. To my mind this is the most serious objection that can be offered.

---

## Selections.

---

### On the Action and Elimination of Iodides.

---

THE high repute which iodine and its preparations have enjoyed ever since the introduction of this metal into therapeutics by Curtosis at the beginning of this century, rests almost exclusively upon an empirical basis. The physiological and experimental researches instituted with these drugs have hitherto shed but a dim and scanty light on the actual mode and nature of their efficacy. It is almost easier and shorter at the present day to enumerate the maladies in which iodine and its preparations are not ordered than those in which they are employed. This state of affairs is aptly illustrated by the well-known bon-mot appearing in the text-book of Nothnagel-Rossbach: "When the physician is at a loss what to do, he prescribes the iodide of potassium." Only a year or so ago the medical world received with surprise the authentic report of an entirely new pathological field for the curative power of iodide of potassium (*Progres Medical*, October 4, 1884), Prof. Fournier, of Lille, publishing a case of genuine tubercular lupus which was cured solely by this drug.

Still, in spite of the uncertainty and even confusion which exists in our knowledge of the therapeutic virtues of the iodides, clinical experience has well established their high value in a number of morbid processes, among which deserve to be especially mentioned syphilis, hypertrophy of the thyroid body, scrofulosis, gout, alterations of the aorta and great vessels, asthma, chronic bronchitis, and albuminuria.

If, however, experience has taught us numerous indications for the employment of iodides, it has given us no insight into their *modus operandi*; we are, in one word, very rich in empirical facts, but very poor in rational notions as to these important remedies.



Regarded by some therapeutists as moderating agents of nutrition, by others as stimulants of the same, the iodides have in turn been accused of creating obesity and reducing it, of augmenting diuresis and diminishing it, of increasing the elimination of urea and decreasing it again. This conflict of contradictory opinions compels us to appreciate the thorough and strictly scientific study of Dr. Dugene-Louis Duchesne (Paris, Inaugural Essay, 1885) on the action and elimination of iodides, which we hereby present in its essential features to the readers of the *Therapeutic Gazette*.

#### I. ACTION OF IODIDES ON DIURESIS.

*Iodide of Potassium* was administered in fifteen cases in doses varying from  $7\frac{1}{2}$  to 75 grains, and for a period of two to thirteen days, and gave the following results: In seven cases the urine was noticed to be increased slightly (2 to 8 ozs.), and in one case greatly (30 to 34 ozs.) In seven cases a slight diminution of the urine was observed during the period of the administration of the drug (2 to 7 ozs.) These variations move between such restrained limits and show such direct oppositions, that we are forced to assume that they are wholly independent of the influence of the drug.

*Iodide of Sodium*.—This drug was administered in one case in doses of 60 grains *pro die* for a period of nine days, with the following results: The urine increased 2 ozs. during the period of administration; in another case, where 30 grains were given for six days, a diminution of 22 ozs. was observed. During six days following upon the cessation of the drug, the diminution of urine amounted to one quart. It is hard to draw any definite conclusions from these contradictory observations.

*Iodide of Calcium*.—In two cases where this drug was administered in daily doses of 30 and 60 grains respectively for a period of six days, a diminution of 5 to 6 ozs. during the period of administration and during the following period was noted. We know, then, that the iodide of calcium does not increase urination, but rather appears to diminish it.

*Iodide of Ammonium*.—This drug, administered in doses of 45 grains daily for six days, produced an augmentation of 4 ounces of the urine for the first three days of administration. During the fifteen days following upon the cessation of the drug, this diminution amounted to 14 ounces.

In another case, where 15 grains were given for nine days, an increase of 24 ounces during the first four days, and a diminution of  $5\frac{1}{2}$  ounces during the last five days, was noticed. During the five days following upon the cessation of the drug the diminution amounted to 8 ounces.

These two results go to show that iodide of ammonium augments slightly diuresis during the first few days of its administration, and decreases it later.

*Polyiodides* (KI, NaI, CaI,  $\text{NH}_4\text{I}$ ).—In one case where the polyiodides were given for five days in equal and progressive doses of 15 to 75 grains, the urine decreased 20 ounces during the period of administration, and increased 4 ounces during the following five days. In a second similar case a diminution of  $3\frac{1}{2}$  ounces during the period of administration, and an increase of 39 ounces during eight following days, took place.

The combination of iodides appears thus to act inversely as the iodides alone—viz.: to diminish diuresis at the end of the administration of the drug, and to increase it during the days following upon the cessation of the drug.

*Tincture of Iodine*.—In five cases where the tincture of iodine was exhibited in progressive doses of 8 to 28 drops for a period of five to fourteen days, the urine increased in every case (excepting one)  $4\frac{1}{2}$  to 6 ounces during the period of administration. In the six days following in all cases (excepting two) a diminution of 10 to 28 ounces was observed. Hence we learn that the tincture of iodine increases urination at first, and then after cessation of the drug leads to a diminution of the urinary quantity.

## II. ACTION OF IODIDES ON UREA.

*Iodide of Potassium*.—Under the influence of this drug urea was found to increase. The increase persisted, and even grew during ten or fifteen days following upon the cessation of the drug. These variations, though, are not great, from 30 to 45 grains usually; they never exceed 120 grains; in one case only the enormous figure of 210 grains was reached. The dose, the mode of administration, and its duration, did not influence in any way these variations.

*Iodide of Sodium*.—This drug given in a comparatively large dose (60 grains) produced a temporary increase of urea, which was soon followed by a notable decrease, lasting for several weeks after the cessation of the drug, and amounting to the enormous figure of 50 per cent.

*Iodide of Calcium* lowered quite appreciably the figure of the uric excretion even for a period of two weeks after the cessation of the drug.

*Iodide of Ammonium* raised the secretion of urea at the end of the administration of the drug, and lowered it during the following eight or ten days.

Polyiodides were found to decrease the excretion of urea during their administration and during the following three days. His conclusion as to the effect of the tincture of iodine was that the latter had a varying effect upon nutrition as to the exhibited dose; in a dose of 16 drops and exhibited for a period of about a week, the tincture was found to exert a decidedly favorable effect upon the general nutrition. If, however, this dose be exceeded and the period of administration prolonged, the reverse condition—viz.: a notable depression of nutrition—took place.

*Action of Iodides on Uric Acid.*—The iodides of potassium and calcium were found to slightly increase the excretion of uric acid.

The iodide of ammonium produced a considerable augmentation of the uric acid excretion, while the polyiodides lowered the same.

At the conclusion of his study Dr. Duchesne arrives at numerous interesting results as to the action of the iodides on nutrition and their mode of elimination, which we shall briefly refer to.

The iodides have but a slight action on diuresis.

Their influence is marked by a slight increase of the urinary excretion during the period of administration of the drug, and at times during the first few days of this period only. The increase is soon followed by a decrease, which persists for ten to fourteen days after discontinuance of the drug. Among the salts of iodine, the iodide of potassium showed the feeblest action in this respect.

The iodide of ammonium and the tincture of iodine act alike on the urinary excretion, increasing it during the period of administration, and reducing it immediately after cessation of the drugs.

The elimination of nitrogenous matters (urea and uric acid) is modified by both the salts and the tincture of iodine, though the various preparations do not act alike. Iodide of potassium augments the uric excretion during the following ten to fourteen days. The augmentation, which is always 30 to 45 grains daily, may amount to 105

to 120 grains (exceptionally to 225 grains). The tincture of iodine acts as the iodide of potassium, but more energetically.

All the preparations of iodine favor likewise the elimination of uric acid during and after the administration. Their association, however, and the tincture produce the opposite result. During and after their administration the uric acid elimination is decreased.

These observations show the impossibility of considering the iodides *en masse* either as stimulants or depressants of nutrition, as some favor the elimination of nitrogenous matters, as the tincture of iodine and the iodide of potassium, and others retard this elimination, as the iodides of sodium and calcium.

Therapeutically, we infer from these facts that, wherever an energetic action upon nutrition is intended by intensifying the process of nitrogenous elimination, the potash combinations, or still better the metallic salt, recommend themselves. Such indications would arise in all maladies attended by a weakened nutrition, such as stone in the bladder, gout, rheumatism, and others.—*Therapeutic Gazette*.

---

### Rochester (N. Y.) Pathological Society.

---

REPORTED BY EDWARD B. ANGELL, M.D.

---

DR. W. SIBLEY presented a paper on "The Management of Uncomplicated Labor, with Special Reference to the Methods of Mechanical Interference so much in vogue at the present time." Taking as his text the physiological character of labor in contradistinction to the morbid nature of disease, and as an illustration the report of a case in a recent number of the *Journal of Obstetrics*, the reader made an earnest and able plea for greater patience in waiting on Nature's slower but safer mode of delivery. Prefacing his remarks with a distinct statement that there were many cases of parturition which deviate from the normal condition, such as placenta prævia, threatened eclampsia, faulty pelvis, morbid growths, etc., wherein instrumental means are absolutely required, the essayist condemned, as needless and injurious, interference in those cases which are delayed only through an apparent inability on the part of nature to terminate them successfully. Many reasons often assigned for



mechanical interference, such as undilated os, with early rupture of the membranes, hard and rugose vagina, rigid perineum or suffering of the patient, he considered rather as indications for delay, since they were obstacles which nature would with ease and safety surmount in time.

"It seems to me," the writer said, "that the suffering of a woman in her labor, which is physiological, is nothing compared with the suffering and inconvenience of a lacerated os uteri, or a complete rupture of the perineum and their attendant effects, which are pathological. The obstetrical forceps are being used at the present day very extensively. If you ask the physician who makes frequent use of this instrument his reasons, he will very likely tell you, 'Oh, to save time and relieve the woman from suffering.' When a physician is engaged to attend a case of labor, it is implied that he understands his duty, and will do it. If he accepts the position as attendant, it is certainly his duty to use his best judgment for his patient, and he should not accept that responsibility unless he can devote the time necessary for the completion of labor. His personal interests or comfort should not sway his judgment nor allow him to use means that will be detrimental to his patient's future interests."

Referring to this matter in a recent article, Dr. Frank Hamilton said: "A young man who was urging me to apply the forceps to his patient, though the result proved it unnecessary, told me that a friend of his, a recent graduate of one of the New York schools, and now engaged in a large obstetrical practice in a neighboring town, assured him that he never put a woman to bed without forceps. I do not hold this young man's teachers responsible for his practice, but the fact illustrates what is now the drift of professional opinion. While there can be no question that the forceps and anæsthetics have been of incalculable benefit to parturient women, I have a strong conviction that since they have come into such common and almost universal use they have done a great deal of harm. I believe the time is not far distant in the future when it will become apparent to all that we have in these matters progressed too rapidly, and, possibly, that our progress has been altogether in the wrong direction."

Allow me to call attention to a letter in the *Medical Record* regarding the methods in vogue at the Vienna Obstetrical Hospital, where the least possible interference with Nature in any way is the rule, and strict antiseptic measures are rarely

adopted. Notwithstanding this reliance upon Nature's weak and tardy efforts, the average mortality is less than one-half of one per cent.

\*       \*       \*       \*       \*       \*

In counting the cost of a forceps delivery, we may look for lacerated os uteri and perineum, abrasions of the mucous membrane, uterine inertia, post-partum hemorrhage and septicæmia, in the mother; fracture of the bones, and lacerations or contusions of the soft tissues, facial paralysis, etc., in the child. Furthermore, the accoucheur is unmindful of the pain inflicted on the child, whose head he has between the blades of his forceps, during the vigorous effort that is sometimes required in the delivery.

Such, in fact, is the course pursued in many cases where there is not the slightest occasion for such treatment, and it is, indeed, needful that something should be done to arrest the reckless temerity of men calling themselves physicians, who, if we are to judge them by their acts, place a very insignificant estimate on human life. This may seem very severe language, but I am inclined to believe it is not overdrawn: when we read the reports of cases which, viewed from our standpoint, present symptoms of delayed labor only, but in which the forceps are applied with such fearful results, are we not justified in calling a halt? In my experience of twelve years, in which I have attended about six hundred women, I have never had occasion to use forceps. Neither have I seen, in my own practice, a case of post-partum hemorrhage, complete laceration of the perineum, vesico-vaginal or recto-vaginal fistula, and but one case of puerperal fever, and that rather the result of a preceding accident. In this connection I may add that it has become a routine practice with me to examine carefully all the cases I attend for ruptured perineum.

Post-partum vaginal injections are unnecessary and injurious: unnecessary, because nature supplies a protection to the slight abrasions which occur through the plastic lymph thrown out; injurious, because the fluid acid, washing away this protection, will allow the absorption of the uterine discharges. While thus waiting Nature's efforts, much may be done, however, to relieve the discomfort and weariness of the patient through a kind word of encouragement, a change in the position, a little nourishment or similar attention. A close observer of Nature's methods will soon learn that rupture of the membranes often facilitates labor, if they are

tough and tenacious. Often the knee-chest position will assist materially in righting a faulty presentation. I well remember a case in which a shoulder presentation was corrected and vertex position gained, followed by easy delivery, through the combined effect of the knee-breast posture and by manual manipulation. With drugs to assist labor I have had very little experience. Ergot I consider potent for good or evil; I never give it except at the close of the second stage. Opium is a remedy of great value. I use it in all stages of labor, if occasion require. Anæsthetics, if used with discretion, are, no doubt, of real service.

Dr. Wm. R. Howard disapproved of the use of forceps, and referred to the well-known fact that a prominent physician of the city had never employed them during the whole of his long experience. He would use no drugs to facilitate labor, but considered the vaginal douche after labor of advantage, because of the comfort it afforded the patient.

Dr. C. M. Briggs had been taught always to carry forceps in his obstetrical practice, but had used them only four or five times. He had used them when he was confident they gave the only hope of delivery. He related a case to which he was called in consultation, in which there had been a delay from impacted occipito-posterior position for three days, with consequent exhaustion. He dilated the os, applied the forceps after placing the patient in the knee-breast posture, thereby relieving somewhat the downward thrust of the head, and delivered the child with safety to both. But, with accumulating experience, he was inclined to be more and more conservative in applying the forceps, greatly preferring the moderate use of chloroform to facilitate labor, especially toward its close. He had found it particularly valuable at that moment of intense suffering when the head presses on the perineum. He recalled one case where the pain was so severe as to cause the patient to relax all effort. The use of chloroform, within the limit of unconsciousness, gave relief, and the child was born at the second or third expulsive effort. He would limit its use in general to those cases where keen, fruitless distress supplants the normal efficient labor pains. Regarding ergot, he usually gave it just previous to the termination of labor.

Dr. Angell called attention to the liability of injuring the head through pressure in the application of the forceps. He referred to two or three cases of severe cerebral disorder under recent observation, wherein the history of each began



with an instrumental delivery. A life of disordered intelligence, or inco-ordinated nervous activity, was a terrible price to pay for the saving of a little time or the sparing of a little suffering. The possibility of disaster to the little life must not be overlooked in the desire to serve the mother.

Dr. Wooden had applied the forceps over one hundred times, and had reached the conclusion that it was the wisest to trust more to nature's measures and use artificial means less. The only feature that required active interference was undilated os, which was best treated by a suppository of half a grain of morphine. That usually gave the patient a brief sleep, and the os was found dilated on awakening. He would do nothing toward rupturing the membranes till the head was pressing well down on the perineum. He never used ergot during labor, inasmuch as, in his experience, before the end of labor, it caused tonic contraction of the uterus, and clonic contractions after, with flowing during the intervals. Regarding the use of the forceps, he believed further that they could not be employed without more or less laceration or bruising of the tissues. He recalled three cases of complete rupture of the perineum, two of which had resulted from the use of forceps, while he remembered several tears extending to the anal sphincter following their application. A three years' record of obstetrical practice had shown him that in his forceps cases he had a higher pulse and temperature, with slower recovery, than in his normal labors, while there was a greater tendency to floodings. He had encountered three or four violent post-partum hemorrhages, all following the use of forceps.

Dr. Preston referred to the discussion regarding instrumental labor that occurred in the society two years ago. At that time he thought he had used them perhaps too freely, and resolved to leave them at home and send for them only when a necessity arose. The very next case he had was one he had watched carefully during pregnancy, with the anticipation of an uneventful issue. But just as the os was fairly dilated, his patient gave unmistakable signs of impending eclampsia. He sent for his forceps in great haste, delivered safely, and never again went to a case unarmed. It was true that post-partum hemorrhage was more frequent in forceps cases, but we must not forget that such cases were usually difficult labors, and therefore more liable to result disastrously. It was furthermore true that all forceps cases get some laceration; he never saw one without



some tears, while there was also great danger of abrasions of the mucous surfaces, with consequent risk of septicæmia. He would recommend supporting the protruding arms, but not the advancing head.

Dr. Wm. Moore had applied the forceps forty or fifty times, usually because of exhaustion, but he was using them less frequently as his experience became larger. He advocated the use of opium instead, in order to afford rest.

In reply to a question, Dr. Wooden stated that, in his experience, a patient to whom nourishment was given always vomited before the os was dilated, but never after. Regarding the abdominal bandage, he had abandoned its use for three reasons: 1. It was troublesome to apply. 2. He had noticed the uterus without it was high up in the abdomen, and he feared bad results in consequence of its pressure. 3. He did not believe it contributed any toward the regaining of form. Its only value consisted in the support it furnished the relaxed abdominal walls.—*Buffalo Medical and Surgical Journal*.

---

### Ptomaines and Leucomaines.

---

Translated from *L'Abeille Medicale*, January 18th, by F. R. Campbell, M.D.

M. GAUTIER, in a recent communication to the French Academy of Sciences (January 12, 1886), gives the results of experiments, showing the physiological action of the post-mortem alkaloids. The alkaloids were obtained from putrid meat. He first experimented with—

1. *Ptomaines Extracted by Ether*.—One gramme of aqueous solution of this ptomaine injected subcutaneously in a medium-sized dog produced, after twenty minutes, the following phenomena: Irregular oblique pupil, convulsive trembling, frequent pulse, a remarkable congestion of the capillaries of the tip of the ear, with two degrees increase of temperature in the part. Then the animal became stupefied and the pupil contracted. Forty minutes after the injection, spasmodic contractions of the muscles of the face and limbs and slow respiration appeared. Forty-five minutes after the administration of the ptomaine, death. The right heart was found full of clotted blood, the left was contracted and empty. The same effects were observed in frogs.

2. *Ptomaines Extracted by Chloroform*.—After the putrid meat had been exhausted by ether, chloroform was passed through it. The residue left after the evaporation of the chloroform was dissolved in acidulated water and injected hypodermically into a dog. Immediately the respiration dropped from 194 to 130 per minute, pulse slightly increased, congestion of vessels of concha of ear. In fifty minutes the effects of the ptomaine passed away. In frogs, the substance produced weakness of muscles, followed by extreme flaccidity. Respiration diminished, sensibility unimpaired, but motor nerves were partially paralyzed.

3. *Ptomaines Extracted by Amylic Alcohol*.—The residue which had been exhausted by ether and alcohol was digested with amylic alcohol, and a yellowish, slightly fluorescent, solution obtained. The ptomaines thus obtained were treated with acidulated water and injected in frogs. Immediately the pupils were dilated, cutaneous sensibility entirely disappeared, followed by general relaxation of muscles and death.

Gautier concludes, from his experiments, that the cadaveric alkaloids are highly poisonous, and that the free ptomaines are more poisonous than their salts. Mixed ptomaines injected into frogs produce the following phenomena:

1. Dilation of the pupil.
2. Tetanic convulsions, followed by flaccidity of the muscles.
3. Slowing of heart beats, rarely acceleration.
4. Entire loss of cutaneous sensibility.
5. Loss of muscular contractility.

In dogs the principal phenomena observed are:

1. Irregular and contracted pupil.
2. Marked injection of vessels of concha of ear, from paralysis of vaso-motors.
3. Greatly retarded respiration.
4. Somnolence, followed by convulsions and death.
5. Loss of muscular contractility.

The loss of muscular contractility resembles that produced by the alkaloid obtained from "toad-stools," *muscarine*, but differs in its effects from *curare*. An alkaloid, with a base corresponding to the formulæ  $C^8, H^{13}, N$ , hydrocallidine was obtained, which was as deadly in its effects as the poison

of the *cobra capello*. One milligramme of this substance will, in a few minutes, produce complete paralysis of the spinal nerves and death.

The writer then discussed the medico-legal aspects of his subject, showing how these cadaveric poisons might be mistaken for vegetable alkaloids, and pointing out means of differentiation.

*Physiological alkaloids*, or those which are normally present in the tissues and secretions, were next discussed. Gautier has denominated these substances *leucomaines*, in contradistinction to the post-mortem alkaloids which are called *ptomaines*. He first experimented with serpent poisons, and extracted various alkaloids therefrom, having a variety of effects upon the living body. None, however, were as poisonous as the original venom. Gautier then obtained similar alkaloids from human saliva, blood, urine, albumen, and especially from muscular tissues. These leucomaines accumulate in excessive quantities in the blood whenever their elimination by the skin, kidneys and intestinal tube are not sufficiently active. It is then that they affect the nervous centers, giving rise to various series of pathological phenomena which, collectively, form the pictures of diseases. This continual autoinfection is resisted in two ways—

1. By eliminating the poisons. Excretion by the kidneys is easily demonstrated. Gautier has always found leucomaines in normal urine, and confirms the statement of Bouchard, who claims that these alkaloids found in the urine are greatly increased in the course of infectious diseases, especially typhoid fever and certain cerebral diseases. Elimination by the digestive tube is also highly probable, but not so easily demonstrated, since some of the alkaloids found in fæces are undoubtedly the products of bacterial fermentation of the contents. Leucomaines are also eliminated by the skin and lungs.

2. Combustion by the oxygen of the blood. The great majority of the leucomaines are very easily oxydized, and converted into harmless compounds. The muscular alkaloids, in particular, are consumed in the blood, so that very few appear in the urine. But when from any cause, the amount of oxygen in the blood is reduced, as inanemia or chlorosis, these alkaloids immediately increase.—*Med. and Surg. Jour.*

## Lecture on Syphilis.

AT the commencement of his second lecture, Mr. Hutchinson discussed the question of secondary and tertiary symptoms. The result of his observations may be given in the following quotation: "Speaking loosely and in a general way, it is still true that visceral affections, gummata, deep ulceration and periostitis belong to the tertiary stage. It is only when these facts are brought forward as if they were constant, and sufficient in themselves to form the basis of classification, that we are compelled to make protest."

He then relates a case in which tertiary lesions were present before the healing up of the hard chancre.

Rupia, in Mr. Hutchinson's opinion, belongs to the secondary rather than the tertiary stage. He has seen cases in which it existed in the primary stage.

Between syphilitic lupus and the true lupus vulgaris there is no relationship whatever. There is, however, a syphilitic form of the true lesion in the same way as in psoriasis.

Mr. Hutchinson's views on syphilitic disease of the palm are most instructive, and ought to be noted by those interested in syphilis. We will give the paragraph in full:

"Perhaps I could not adduce better illustrations of the difference between secondary and tertiary affections of the same parts than by reminding you of what happens in the case of the palm of the hand. In the secondary stage, and simultaneously with the general eruption of the skin, the palm of the hand often suffers from psoriasis. It is always both palms which are affected, not one only; and there are usually in each a number of separate patches which, although of various sizes, are alike in being circular, and covered up with broken epidermis. Most obviously, such symmetrical and multiple affections are due to blood-infection. This form of secondary palmar psoriasis is generally cured very easily by the use of mercury; it vanishes when the rest of the skin eruptions leave, and it seldom returns in the same form. If, at a later period, the palm be affected, it will probably be a patch of considerable size, which has a spreading edge, and which affects one hand only. The hand most likely to be affected is that which the patient irritates most, whether by the use of tools in his employment, or by carrying an umbrella or walking-stick. The later the affection occurs, the more definite will be the characters mentioned.



The condition will be cured by the internal use of mercury; but it will often be found to yield more quickly to the local employment either of that drug or iodoform."

We have had under observation at least a half-dozen of cases of the latter condition, and have found them very obstinate in yielding to mercury or iodide of potassium.

Mr. Hutchinson has strong faith in the efficacy of mercury as an antidote to syphilis. He is of opinion that it will not only cause eruptions to disappear, but that it will prevent the manifestation of further lesions. The form in which he prefers to give it is that of gray powder, and the dose one grain. This dose he gives from three to six times a day, according to circumstances, and seldom for a shorter time than six months. "If this dose be given to a patient with an indurated sore, but in whom as yet no secondary symptoms have appeared, the result will usually be that none will occur."

In the latter part of the second lecture, Mr. Hutchinson relates the following interesting case:

"There is a very severe form of *rupia*, in which the ulcerations coalesce over large surfaces, and the crusts thus lose the typical limpet-shell form. Of this I have seen but very few examples, and the two which have made the most impression on my memory were almost exactly alike. The violence and the suddenness of the second outbreak were, in each case, most marked. The first occurred to me at the London Hospital, nearly twenty years ago, in the person of a young man named K—. I had treated him for a mild attack of secondary symptoms with the usual papular eruptions, and he had got, apparently, quite well. He desisted from treatment, and I lost sight of him for some months. At the end of this time he came back with a vesicular and bulbous eruption just beginning on his face. In conformity with the opinion of those days, that mercury ought to be avoided for such eruptions, I gave him the iodide of potassium. The eruption blazed up with extraordinary quickness, and, in the course of a week, his whole face was covered with crusts; there were many also on his limbs. He became extremely ill, was confined to bed for several months, and was so much emaciated that we thought he would die. At first a mixed treatment of iodide of potassium and mercury was used, and for awhile it seemed powerless. Ultimately, under the influence of mercury alone, the man recovered, but with a lamentable amount of scarring.

Almost the whole of his face was involved in scars; and his lower eyelids were displaced downward."

This case was to us exceedingly interesting, as we have had under observation one almost identical. The patient came suffering from an eruption of the face similar to that mentioned. He had already been taking small doses of potass iodide. He was put on larger doses of that drug, and the result was that the eruption became very much worse. The face was swollen, the eyes closed, and immense crusts formed on the surface. The patient also exhibited considerable pyrexia. The iodide of potass was stopped, and the patient was put on small doses of the hydrarg perchlor with excellent effect. The eruption disappeared in about four or five weeks. We were of opinion at the time that, owing to an idiosyncrasy of the patient, the iodide of potassium increased the virulence of the attack. At any rate, when that drug was no longer administered, improvement was at once noticed.—*Canadian Practitioner*.

---

## How to Open the Bowels.

---

BY C. E. NELSON, M. D., NEW YORK.

---

IN the New York *Medical Journal* of January 30th, page 122, is a unique article, by Dr. Chadbourne, on an unusual route taken by feces—this following the route sometimes taken by pus in spinal disease. As an article, the case is intensely interesting; but the treatment before the accident I entirely disagree with. Dr. Chadbourne will immediately understand that my strictures are not personal, because there is no doubt but that nine physicians out of ten would have employed the same treatment. It was two days after the patient was first seen that the bowels were opened. Dr. C. says, on page 125, that there was "a free evacuation." I dissent from this statement, and consider that they were opened, but not freely. I think that during not only those two days, but during the preceding week, when under the care of another physician who made a mistaken diagnosis, precious time was lost, in not giving a good purgative. Instead, miscellaneous treatment was adopted, which I will now notice *seriatim*.

As a preliminary, I will remark that the very rapid pulse

and number of respirations per minute should have strongly indicated the importance of rattling out the bowels; as these irregular symptoms were evidently caused by an impending catastrophe, and did not indicate an ordinary case of fever. Now for the treatment. It is the plan now to give quinine in large doses, in the presence of febrile symptoms, as if you were merely treating the fever, and not the cause of that fever; the higher the temperature, the more quinine. The bowels are almost neglected.

Morphine was freely administered to relieve pain, again a symptom; the pain was caused by the same thing that caused the fever. And now we are getting into a vicious circle. The morphia locked up the bowels still more. This is the mistake that is daily made in peritonitis, and from which many patients lose their lives. The whisky and ice, given for nausea, locked up the bowels still more. "The face and hands were sprayed with alcohol," and "a jug of hot water at the feet." These measures could hardly affect the abdomen very much. At last, when the abdomen was very much distended, a soapsuds injection was administered. Many physicians think that warm fomentations on the abdomen and rectal injections are sufficient to move the bowels. I answer, if a good dose of senna and salts had been given early in the trouble, the various surgical accidents that ensued would undoubtedly have been obviated.

As regards the after surgical treatment, I should never apply iodoform, because it is irritating and poisonous. And, as regards drainage tubes, I do not think them at all necessary, while they act as foreign bodies, and no doubt keep up irritation.

I wanted, in this article, to emphasize certain points in the treatment, very generally adopted and put in force by the profession, and not to criticise Dr. Chadbourne. I think that practitioners should depend more on their own individual reflective powers, and be swayed less by fashion. The practice was, seems to me, to treat symptoms, and not go to the cause.

---

### Vaginal Injections.

---

DR. W. THORNTON PARKER, of Newport, R. I., in a recent issue of the *Journal of the American Medical Association*,

offers the following valuable suggestions as to the use of this form of medical treatment:

Dr. Storer considers that four general indications exist for vaginal injections: 1. As a lavement for cleansing purposes. 2. For the purpose of producing a deep-seated effect for relieving chronic congestions. 3. When an exosmotic effect is desired, as in the use of saline and other solutions. 4. When a local effect is desired, corresponding with gargling for the throat, etc. In the latter class of cases the recumbent position might be more advisable. He thinks that vaginal injections are unquestionably too often prescribed; and that physicians are reckless in directing ingredients for vaginal injections that are of the most unsuitable kind, and often productive of lasting injury. Sometimes even dangerous ingredients are used, creating instead of alleviating disease. Such injections are sometimes followed by a more serious disease than they were at first intended to relieve. The same discretion should be used, in prescribing vaginal injections, that one employs in treating the mucous membrane of the eye or fauces. Every gynæcologist must have witnessed the deplorable effects, resulting in almost ruined vaginal walls, from too severe injections of such substances as alum, tannic acid, etc. With the most ordinary skill on the part of the medical attendant, the syringe which we recommend ought to be a safe one. It is well, however, to remember that serious injury has resulted from neglect to empty the air from the tube before inserting into the vagina. Care should be taken that no air enter the bulb or tube while filling the syringe. By using a bidet, this accident is more readily avoided if plenty of water be used, but with an ordinary hand-basin it is of frequent occurrence.

Many syringes are so constructed that a pint or more of water answers for the entire "sitting," being used over and over again, becoming filthier and filthier each moment. Such machines have little to recommend them. A copious water supply and a copious stream are the most desirable features in a good vaginal injection, and a syringe which can not accomplish this is simply worthless. Cheap syringes are commonly offered for sale because they are cheap. For a good vaginal syringe a fair price must be paid. In drawing attention to the dangers from careless vaginal injections, it may be well incidentally to note the recklessness with which some medical men recommend intrauterine injections. This is the more inexcusable, since so many general



practitioners practice gynæcology to a considerable extent. Intrauterine injections are seldom justifiable, and then only when they can be employed by a safe instrument, acting more or less on the principle of the double canula. For the vaginal injection with the syringe we recommend, the best possible ingredients are boro-glyceride in solution, borax, and even common salt in suitable proportions. Much of the benefit derived by women from sea-bathing, aside from the general constitutional tonic effects of seaside air and salt-water baths, is the fact that the sea water does actually enter the vagina during the usual exercise of bathing, and exerts thereby a cleansing, healing effect upon the vaginal walls. While the possibility of such entrance of salt water has been denied by some, on the ground that the walls are too closely approximated to admit any water, the fact remains the same that water actually does enter, and that inquiries made have proved this beyond question, not only in the case of multiparæ, but of others, and even virgins. The closure of the vaginal walls is not like that of the closure of sphincter ani. Besides these preparations, there are others which can be used in greater or less strength, according to indications. The large tube will be found often too large for unmarried women, and for such cases the rectal tube can be used; but, generally speaking, the large vaginal tube is suitable where injections are found to be necessary. The use of the syringe can not alone cure diseased vaginal walls, and the atomizer and other appliances must play their part, not to speak of the surgery necessary for the uterus, and the special treatment needed in all uterine cases. In vaginal injections properly administered we have an invaluable aid in the treatment of many of the diseases of women, and a guard against the attacks of diseases to which woman is so liable.

In conclusion, the physician should be careful to advise against the prolonged use of vaginal injections during pregnancy, and also to caution patients against using injections of any kind during the menstrual period.—*College and Clinic Record*.

---

### Evolution in Pathology.

---

**CORRELATION AND ITS EFFECTS.**—Huxley has enunciated the principles of evolution in the form of three laws. Firstly, there has been excess of development of some parts in rela-

tion to others; secondly, certain parts have undergone complete or partial suppression; and thirdly, certain parts, which were originally distinct, have coalesced. Huxley uses the term "law" as a general statement of facts ascertained by observation. A good example for the illustration of these laws is the female generative organs. Ascending the scale of animated beings, we find, although every animal possesses, at some period of embryonic life, male and female organs in a potential form, yet, normally, one set, either those peculiar to the male or those peculiar to the female sex, gain the ascendancy. This serves as an illustration of the first law; that is, there has been an excess of development.

Associated with this excess we find suppression, or more or less complete disappearance, of the opposite set of organs. Thus we obtain an excellent illustration of the second law. In fishes, batrachians, reptiles and birds, the female generative ducts are, for the most part, represented by oviducts (Mullerian), quite separate, although in birds one usually disappears. In mammals, the representatives of the oviduct fuse in the middle line through a greater or lesser extent, and constitute a median uterus. This illustrates the third law, or coalescence of parts originally distinct.

My object in these lectures is to endeavor to show that the structural aberrations of animal bodies of which pathological anatomy takes cognizance follow the same laws; which, when expressed in the terminology peculiar to that science, may be reduced to two: 1. Correlation (Hypertrophy; Atrophy). 2. Coalescence. Correlation leads to abrogation of function, and gives rise to rudiments; these rudiments, or remnants, may serve as the germs of origin of many forms of cysts and neoplasms.

To any one who has devoted serious attention to the matter, it must be evident that the term hypertrophy has come to be used by pathologists, physicians and surgeons in an exceedingly indefinite manner, to include almost any kind of enlargement of the organs, limbs or bones of the body, without that careful attention necessary to discriminate between simple overgrowth, functional enlargement or increased size, the result of adventitious elements in the part affected. True hypertrophy may be defined as "the enlargement of an organ beyond its usual limits, as the result of increased function, or of some unusual condition of the corresponding or correlated organ." In old, bedridden

females it is no unusual event to find the nail of the great toe enormously overgrown, and in texture, as in appearance, resembling a ram's horn.

The same kind of excessive growth may also be studied in those mammals whose teeth grow from persistent pulps. If there be accidental displacement of the teeth in their sockets, or loss of antagonism from fracture of the tooth or of the jaw, the unaffected tooth will grow unduly, in some instances reëntering its own pulp-chamber; or it may even describe two and one-half circles. All such cases as these are loosely alluded to as examples of hypertrophy; but, as a matter of fact, they should be regarded as instances of simple overgrowth.

Hypertrophy, on the other hand, can best be studied in muscular tissue, whether of the voluntary, involuntary or cardiac variety. With regard to the heart, illustrative specimens are to be found in every pathological museum. The urinary bladder, when stricture of the urethra or calculus impedes the free flow of urine, submits to this sanitary process. The same changes may be seen in the gall-bladder; and the various stages of hypertrophy may be traced with great precision on that remarkable mill of many birds—the gizzard.

Let us now consider the relation, often of the most intimate kind, which exists between hypertrophy and atrophy. It is a thoroughly established physiological fact, that those organs which are in most constant demand are richly supplied with blood; hence, function and blood-supply are inseparably united in producing hypertrophy. The relation which exists between hypertrophy of one organ and the atrophy of some associated organ may be conveniently termed correlation. Any marked degree of hypertrophy in one organ, nearly always leads to dwarfing of the correlated organ or set of organs. While two sets of reproductive organs, male and female, up to a certain point, maintain the same degree of growth, it is impossible to determine the sex of the embryo.—*J. Bland Sutton, F. R. C. S., New York Medical Abstract.*

---

### The Cause and Prognosis of Cerebral Apoplexy.

---

THE unfortunate illness which has attacked Secretary Manning calls attention to some of the facts which the

modern pathologist has developed, or is still studying, with regard to the subject of cerebral hemorrhage. One fact which the pathologist has not perhaps felt called on to investigate is the apparent increase, relatively and absolutely, of this trouble. In England and Wales, during the years 1850-54, the average annual death-rate from apoplexy per million inhabitants was 454.2, while in 1870-74 it was 523.8. During the same periods the ratio of deaths from brain diseases increased from 192.4 to 248.6.

In New York City the total deaths from apoplexy and hemiplegia in 1874-75 amounted to 1.35 per cent. of the total death-rate; in 1884 the percentage was 1.8. Even bearing in mind the fact that more persons reach the apoplectic age now than thirty years ago, it still remains probable that apoplexies are on the increase.

Modern pathology has shown that the primary cause of cerebral hemorrhages is, in the great majority of cases, the bursting of miliary aneurisms which have developed on the cerebral vessels as the result of a local periarteritis. The most important supplemental cause to this is an increased arterial tension due to heart disease, plethora with corpulence, and disease of the kidneys with the arterial sclerosis often accompanying it. Charcot found hypertrophied heart in forty per cent. of cases of cerebral hemorrhage, and renal disease in  $32\frac{1}{2}$  per cent.

The cause of the miliary aneurisms is naturally the point that should most interest the physician, but here little progress has been made. We know in general that they develop almost solely in persons past forty, while from fifty to seventy is the apoplectic age. As in five-sixths of the cases atheroma of the arteries is present, we may attribute the aneurisms to much the same cause as the atheroma, viz., degenerative changes natural to old age, chronic alcoholism, specific disease, and continual excesses and exposure of almost all kinds. They develop more often in men, and heredity, as shown by Hughlings-Jackson and Dieulafoy, undoubtedly plays its part.

It is still a matter of some doubt whether such a thing as the "apoplectic habit" exists. Most systematic writers of late years deny it, but it is very evident that many of these authorities either "speak by the book," or argue from a hospital experience among the poor, who do not suffer from corpulence. We are ourselves much inclined to side with Immermann, who places apoplexy among the prominent



"complications and sequelæ" of corpulence, especially if with it there is plethora. A corpulent man who has passed the age of fifty is more likely, other things being equal, to have degenerated arteries and higher arterial tension than a spare man. He is more in danger of an intracranial hemorrhage.

Brain-workers are not by virtue of their work made liable to apoplexy. This is a disease of nutrition and of the blood-vessels; its causes are senility, exposure and intemperate living in the broadest sense. Whatever puts off old age delays degenerative changes and lessens also the tendency to apoplexy.

The prognosis after an attack occurs relates to life and to health in the future, should life be preserved.

Quick onsets, quickly recovered from, are more favorable than those coming on slowly. When the attack comes on without loss of consciousness, as was the case, we are told, with Secretary Manning, the prognosis *quoad vitam* is very good. If loss of consciousness is profound, and lasts twenty-four or forty-eight hours, the outlook is most ominous. But one of the worst prognosticators of the future is the clinical thermometer. A progressive rise or a steady fall of temperature means death, while an absence of rise or fall of temperature is a most favorable sign. The extent of the paralysis and aphasia, if that exists, gives a fair indication of the extent of the lesion, and this, in connection with a history of its progress during the first fortnight after the attack, will tell how much of mental or physical restoration can take place.  
—*Editorial in N. Y. Medical Record.*

---

### The Successful Resection of Five Feet of Intestine.

It is, we believe, only about four years since the gangrenous gut in strangulated hernia has been successfully resected by a primary enterorrhaphy. In 1884, Baum, of Danzig, removed 137 ctm. by a primary operation, but the patient died. Koberle has successfully removed two metres of the intestine by a secondary operation.

Recently Professor Th. Kocher, of Bern (*Correspondenz Blatt*, March 1, 1886), reports a case in which he successfully resected 1 metre 60 cmt. of gangrenous intestine. As this, according to his statement, is the first time in which so large a portion of the intestine has been successfully removed

in strangulated hernia with gangrene, the case deserves some notice.

The patient was a laborer, fifty-seven years of age, and for years had had a right-sided inguinal hernia of about the size of an egg. He was brought into the hospital while suffering from a strangulation of the gut that had lasted about twenty-four hours. An operation was deemed necessary, and upon cutting down into the sac the intestine was found plainly very œdematous and gangrenous. On account of the extensive gangrene it was decided to resect the intestine rather than leave it. This was accordingly done, under careful antiseptic precautions; thirty vessels in the mesentery had to be ligatured. The wound was closed and a drainage-tube inserted; the patient was fed mainly by the rectum for three days. The wound healed without any reaction or complication, and the patient was discharged, perfectly well, in eighteen days. He was seen again in the fall, and reported that he had never been better in his life.

Kocher makes a number of interesting comments upon this case. He explains the mechanism of the sudden strangulation by the extremely high pressure in the sac. This reached 67 ctm. of water, while the pressure in the mesentric veins is only about 40 ctm. of water, hence stasis of the blood, œdema and gangrene.

The question in this case arose as to whether there should be a resection, or whether the parts should be left to form an artificial anus. In Kocher's opinion the conditions forbade the latter plan. The statistics of Heimann (83 cases) gave for the operation for artificial anus a mortality of only five per cent., while the statistics of Guillard (44 cases), and Madelung (88 cases) make the mortality for intestinal resection about fifty per cent. Kocher, however, takes a much more gloomy view of the future of patients who are left with an artificial anus, and thinks that a great part of them die of malnutrition, or some intercurrent disease of the bowel. Kocher, therefore, on these grounds, and on the ground of the greater safety of enterectomy under careful antisepsis, makes a plea for the more frequent application of this operation in cases of strangulated hernia with gangrene.—*Medical Record*.

## Fracture of the Larynx.

DR. JOHN B. BERRY thus writes in the *Lancet*:

During the afternoon of February 6th I was called to see G. L., aged twenty-one. He was reclining on a sofa, looking very pale. Extending from the tip of the chin to just above the hyoid bone was a superficial wound. The voice was like that of laryngitis. The prominence of the thyroid cartilage was gone. Placing my hand over the throat and requesting the patient to swallow, I detected unmistakable crepitus of the moving larynx. A more careful examination revealed what felt like a separation of the wings of the thyroid cartilage. The history of the accident was briefly this. About twenty minutes before I saw him he was working a circular saw, and was suddenly struck in the throat with great force by a large piece of wood coming from below upward. For a few moments he had a hard struggle for breath, but managed to keep from falling by leaning against a bench. Water was brought to him, but he declined it, as he feared it would choke him. With the help of two men he walked home, a distance of about 500 yards from his work. Having applied a warm water dressing to the throat, the patient was put to bed, his head and shoulders being raised. An hour later I saw the patient again in conjunction with Mr. Chaffers, whose help I sought when I saw the case was of such gravity. My diagnosis was confirmed, and seeing the patient was free from urgent symptoms, the breathing being quiet and full, and the condition of shock gradually passing off, we considered it best to continue the warm water dressings and forbid anything being taken by the mouth except ice, leaving word that any change in the breathing should be immediately reported to us. About half-past one next morning I was called up, as the patient was reported to be choking. After sleeping for about an hour and a half, during which time he breathed rather noisily, he woke up somewhat suddenly and at once began to struggle for breath. When I arrived he was unconscious, the eyes were open and fixed, the pupils dilated, the face pale, and the deep spasmodic efforts to breathe were failing. Having sent for Mr. Chaffers, I at once performed laryngotomy. Still no air seemed to enter, and no mucus escaped from the tube. Having satisfied myself the tube was clear and that no blood was obstructing the air-passages near the wound, I enlarged the opening and replaced the tube, with no better result,

death taking place after a few more respiratory efforts had been made. Half an hour after death Mr. Chaffers and myself examined the larynx and trachea as well as we could through the operation wound. Besides the separation of the wings of the thyroid oblique, lines of fracture were made out on each side, through the wings themselves. Within easy reach of the finger, hanging down the trachea by a mere shred of fibrous tissue, was a part of the left wing of the thyroid cartilage itself, the size of a finger-nail, apparently the lower front angle; this was easily removed. I regret no post-mortem was allowed, as I am still in doubt whether to attribute the asphyxia entirely to the one piece of cartilage found, which was not wedged in the trachea, but simply lying flat against the anterior surface, but it may have acted like a valve during inspiratory efforts. During life, I may add, there was no spitting of blood, and after death perfectly white frothy mucus welled up from the throat.—*Med. and Surg. Rep.*

---

### Treatment of Diphtheria with Balsam of Peru and Oil of Turpentine.

---

BY ROBERT OFNER.

---

IN the "*Centrälblatt für die gesammte Therapie*" I read a notice concerning the treatment of diphtheria by means of oil of turpentine. There were, however, only four cases reported by Dr. Bromkowsky, and four by Dr. Jozefomicz. In No. 25 of *Illustrierte Zeitung* of Berlin is the same subject treated of, and in a fuller manner than one usually finds in a paper published for entertainment. These encouraged me to give the results in more than sixty cases that I have treated in an almost similar manner since the year 1878.

At that time I was physician to a factory and general practitioner in Pohrlitz, a village in Southern Maehren. In this section occurred every possible disease, and also the universally known and feared diphtheria, of which Seitz, in his profound work, says that it overruns everything—high up in the splendid, aromatic mountain air as well as in the marshy valley, in the proud palace as well as in the rickety log hut.

My father was also a physician, and I remember that he treated wounds almost exclusively with balsam Peru, at least



where it succeeded, and I do the same, though I sometimes have to change to iodoform. The tonsils in diphtheria are also wounds, and all of the medicaments generally used in treating it have no decided effect—so I took to balsam of Peru. To use for mopping the throat it is too thick, so I thin it with alcohol and add oil of turpentine.

As I am, in my leisure hours, a painter also, and painters have balsam Peru and turpentine on hand, so I had, too, a brush with which I could pencil energetically.

The results were truly surprising. Cases over which the doctor usually shakes his head thoughtfully, recovered in three or four days without pressing symptoms, and mild cases healed not seldom after one or two moppings. I mention the house of Vogt, a rich merchant, in which diphtheria kept confusion for months, and where I made the observation that every eight days a new candidate for a mopping was brought to me. A four-year-old girl had the worst case, the whole throat being covered with membrane, and parts which were well cleared in the evening would by morning be white. After subsidence of the disease, squinting appeared for a short while. The disease lasted fourteen days.

A two-year-old girl, very stout, daughter of a teacher, Mr. Kubanek, was taken with symptoms of croup. On the second day there were dirty looking spots in the throat. She died in spite of the greatest care and attention. Shortly after I was called to a house in which was a little girl of three years, who had already been sick three days without having had anything done for her. On entering the room quite a penetrating odor greeted me. I found the whole throat breaking down. I mopped it four times a day, and the child lived eight days. These two were the only patients that died. Since then I have seen only two cases in which the throat and larynx were simultaneously affected and both recovered. I do not always give medicine internally at all. If the child can gargle, which ought to be taught to every child, give chlorate of potassa as a mouth wash. Chlorate of potassa furthers the expulsion of masses of mucus, otherwise it accomplishes almost nothing.

When the membrane is tolerably large, the patient very delicate, or I see that I must prescribe something, I give the following:

R. Vitelli ovi, . . . . . No. j.  
 Aquæ, . . . . . q. s. ~~PLUMBER~~  
 Pulv. Emulsionis,  
 Ol. Terebinth. gtt. x. . . . . ad 2.0.

Sig. One spoonful every two hours.

I am fond of prescribing turpentine in this way, and give it not only in diphtheria, but also in pneumonia, gastro-intestinal catarrh, etc.

That diphtheria under this treatment will become dangerless I do not affirm, but I can say that balsam of Peru is an antidote.—*St. Louis Courier of Medicine*.

### A Note on Lewinin, the New Local Anæsthetic.

IN the editorial columns of the *Philadelphia Medical News* of February 13, 1886, there is given a brief account of the physiological properties of a semi-fluid resin obtained from the root of *Piper methysticum*.

In the method employed in obtaining it (extraction by petroleum-ether) two resinous bodies are obtained, the resin of lesser density only being efficient. To this body Lewin, its discoverer, applies in his original communication the rather cumbrous title of "Alpha Kawa Resin," for which I have ventured to substitute the name lewinin, as above.

Although I have not been able to obtain, in my experiments with the extract in question, results as marked as those presented by Lewin, several points of clinical interest have arisen, which will, I think, be of interest.

When the semi-fluid lewinin is placed upon the tongue, there is a momentary burning sensation with increased salivary secretion, followed by a local numbness, which, while extremely superficial, is recognizable for more than an hour. Some pallor of the mucous membrane at the point of application is noticeable. I have several times swallowed about five grains of the extract thus placed upon my tongue without appreciable results other than those noted.

Lewinin is too painfully irritating to apply in practice to the human conjunctiva, but it is my belief that, by the previous application of cocaine, the lewinin in solution could be instilled into the conjunctival sac, and produce its characteristic effect of prolonged local anæsthesia before the more temporary effect of the former drug has passed off.

The extract will probably be of service in the dental practice, as its application certainly mitigates the discomfort of operations on the teeth of those suffering from sensitive dentine.

The most marked practical benefit, however, to be expected from the use of the drug is in cases where only a relatively superficial anæsthesia is desirable. Thus, as would have been expected, the drug is of value in rhinological practice.

Dr. Harrison Allen, to whom I handed a fifty per cent. alcoholic solution of lewinin, kindly reports that, in practice, he has found a number of cases of nasal trouble in which the drug could not only be availably substituted for cocaine, but in which its action was more satisfactory.

The extract just discussed was prepared for me something over a month ago by Mr. Llewellyn, of this city, and was, I believe, the first specimen of the drug produced in this country.—*N. A. Randolph, M. D., in Philadelphia Medical News.*

---

### The Disinfecting Influence of Watery Solutions of Carbolic Acid.

---

FROM the fact that sweet oil, to which carbolic acid has been added, is still employed in some hospitals and by some surgeons, we can only conclude that it is not yet generally known that a solution of the acid in oil is perfectly inert, and has no aseptic action whatever. If the oil seems to have done good nevertheless, it can only be explained by the oil having acted as a protective against the influence of the atmosphere; its frequent removal, and perhaps, also the presence of the acid, having prevented the oil from becoming rancid. But it is in vain to expect any aseptic action, for carefully made experiments have proven, beyond the shadow of a doubt, that none of the micro-organisms is impeded the least in its growth, development and multiplication, by any amount of carbolic acid, if suspended or dissolved in *oil*.

About the strength which *watery* solutions should have to be effective, there also has been a great variety of opinion. To determine the question, Drs. Gärtner and Plagge, under Koch's guidance, have recently instituted a series of experiments at the German Imperial Board of Health—that institution from which all our knowledge of these things has

emanated during the last decade. (*Arch. f. klin. Chir.*, xxxii., vol. ii., '85.)

These investigations were carried on with the utmost care to exclude all possible sources of error. It was first determined that any watery solution of carbolic acid, to be effective under all circumstances and under every condition, must contain three per cent. of the drug. It has been proven that this solution suffices to kill every micro-organism that may interest the surgeon, provided contact between the microbe and the disinfectant has been established as rapidly as possible after the supposed introduction of the bacteria or after exposure to the air. Amongst other facts that have been elicited by these researches may be mentioned the following: Washing for twenty seconds with this solution was found to free completely from bacteria the hair of a guinea pig, which, with a pure culture of these microbes, had previously been inoculated. All the experiments, further, were made with a "streaming fluid;" that is, the watery solution of carbolic acid was applied by aid of an apparatus similar to a fountain syringe, so that a continuous flow of the fluid and a certain velocity of it could be maintained. This was done to prevent the germs from again coming in contact with the skin. Regarding the knives used in these investigations and soiled by germs, all that was necessary was to let the stream of the three per cent. watery solution of carbolic acid once play over them, after which they were dried with a clean towel. They afterward showed themselves completely free from bacteria.

We learn from these experiments that the only safe solution, if carbolic acid is used for the purposes of disinfection, is a three per cent. watery one. After a wound has been exposed to the stream of such a solution, it should first be covered with an aseptic protection of rubber, etc., and over this the compress is applied, which is saturated with the same fluid, care being taken to prevent any admission of air, except through the disinfected bandages.—*Med. and Surg. Rep.*

---

### The Internal Administration of Antiseptics.

---

THE administration of antiseptic drugs, either as prophylactics or as remedies, has been frequently resorted to in the treatment of infective diseases, but not hitherto with an



amount of success which has encouraged the profession at large to adopt the method. Some experiments, however, which Dr. Theodore Cash is now conducting for the Local Government Board, appear to justify the hope that this line of treatment may eventually be useful. In a communication recently made to the Physiological Society, he stated that he had been led to test the influence of perchloride of mercury, because it was retained in the body for some days after its administration had ceased, and because it was still a powerful germicide, even when very greatly diluted. He found, in an experiment on a rabbit, that, after a quantity of perchloride of mercury, equal to about 8 milligrammes per kilogramme of body-weight, had been injected hypodermically, in divided and highly diluted doses in the course of seven days, the animal only suffered a passing disorder after inoculation with a virus of anthrax which killed another rabbit in forty-four hours. The animal, moreover, was found to be protected against further inoculations with virulent anthrax. A smaller dose (equal to about 5 milligrammes per kilogramme of body-weight) was found to delay, but not to prevent, the onset of the disease. The number of bacilli found in the blood after death in such a case was very small, but it was found that their virulence had not been diminished, the blood of the animal producing an unmitigated and unmodified attack of anthrax in other animals.—*British Medical Journal*.

---

## Microscopy.

---

Reported for CINCINNATI MEDICAL NEWS by A. H. Breckenfeld, Esq.,  
Recording Secretary.

---

SAN FRANCISCO MICROSCOPISTS.—A largely attended meeting of the San Francisco Microscopical Society was held last Wednesday evening at its rooms, Dr. Mouser in the chair.

The files of scientific periodicals were largely added to, and the cabinet received a donation of two finely mounted diatom slides from W. H. Summers, of Chicago. They were especially noteworthy by reason of containing specimens of a newly-discovered and very handsom diatom, *Plagiotropis Calumetica*.

## GERMS OF TYPHOID FEVER.

As per announcement, Dr. Henry Ferrer showed several slides containing the living, actively moving germs of typhoid fever. He prefaced the exhibition by giving a short *résumé* of what is known regarding these interesting organisms. Many attempts have been made for a number of years past to detect in the tissues of typhoid fever patients, some micro-organism, to whose presence could be ascribed the cause of the disease, but it was not until 1880, that Eberth, of Halle, succeeded in attaining a measurable degree of success in this direction. He found in the spleen, and infiltrated lymphatic glands of typhoid fever patients, a short, thick bacillus with rounded ends. Koch had previously found the same organism *in situ* in the tissues, and had obtained photographs thereof, but had not published his discovery. Eberth at first supposed that the bacillus of typhoid could not be stained, or only with great difficulty, but Koch, while corroborating many of Eberth's researches, pointed out various methods by which the staining could be effected, notably, with Bismarck brown and with vesuvin. The Koch-Eberth bacillus, as it is now commonly called, forms endogenous spores at a temperature of 30° to 40° centigrade, and these spores do not take the stain in which the bacillus may be immersed. A noteworthy fact in connection with these bacilli, is the formation of long threads, which were erroneously considered to be distinct organisms by some of the earlier observers, until Koch showed them to be secondary forms of the typhoid bacillus. Treatment with acetic acid distinctly reveals segments in the threads, and at these points the living organisms eventually break up into individual bacilli. Probably the most distinctive characteristic of the typhoid bacilli, is the method of growth in gelatine and other similar media. When a tube containing sterilized peptone gelatine is inoculated with a pure culture of the organism in question, the latter does not liquefy the culture medium, neither do its growing colonies form around the puncture made by the inoculating needle, but they grow entirely at the *surface* of the gelatine, forming a dense grayish-white layer there.

Dr. Ferrer's remarks were illustrated by blackboard diagrams, and in conclusion he showed the living bacilli, in various stages of growth under two fine "Zeiss" microscopes, using that maker's "F" objectives.

Mr. Wickson exhibited a slide of *Trichina spiralis*, sent him by Dr. W. S. Taylor, of Livermore, from a fatal case of trichinosis which occurred in that town last week. The victim was a young German employed in a Livermore meat shop, who had eaten a mince of raw pork and beef which he chopped up for himself in the shop. A few days after eating this he became ill with what was first thought to be typhoid fever, but the disease, trichinosis, disclosed itself just before his death occurred. The specimens showed the nematoid worms free and well distributed through the fibres. The pork from which the disease was contracted, was grown in the vicinity.

#### QUALITIES OF DURABILITY AND BEAUTY—BUILDING STONE.

A really good building-stone should be characterized by the qualities of durability, beauty, ease of cutting and proximity to the localities where it is required. After calling attention to the direct and incidental advantages which would accrue to the community making extensive use of such desirable building material, Mr. Hanks enumerated the rocks best adapted to the purpose, and gave an interesting summary of what is known regarding their composition and the method of their formation. A description was given of the various stones used in the construction of many ancient buildings, and the high point attained by architecture in those days, as evidenced by the ruins of many ancient cities, was graphically adverted to. The counterpart of many of these durable and ornamental building-stones are to be found in this State, and specimens of these can be seen in the museum of the State Mining Bureau.

The so-called "Inyo marble" is considered true dolomite when in chemical proportion, and when otherwise, magnesium limestone. Its hardness is from 3.5 to 4; specific gravity 2.9; weight of cubic foot, about one hundred and eighty pounds; luster, from vitreous to earthy; color, white, various shades of rose red, gray, brown, green and nearly black. When pure it has the following composition:

Carbonate of lime, . . . . .	54.35
Carbonate of magnesia, . . . . .	45.65

---

Total . . . . . 100.00

After giving an interesting description of the general characteristics of dolomite, the theories regarding its genesis,

its physical properties, and its use in the arts and sciences, Mr. Hanks stated that the stone, which was the special subject of his paper, had been selected as the building material to be used in the construction of the Sharon gate at Golden Gate Park. He said: "It is my opinion that no use of the generous bequest could be more appropriate, or more likely to give general satisfaction, and I am fortunate in knowing, by actual observation, something concerning this now much talked of Inyo marble.

#### MONO LAKE AND OWEN'S VALLEY.

"As early as 1862 I traveled from the south side of Mono Lake to the head of Owen's Valley, then without a house or a settler north of Camp Independence. From Adobe Meadows our party of four saw, for the first time, the grand summit of White Mountain, capped with what seemed to be 'aged snow.' When, after passing many weary miles, we reached the base of the mountain, I discovered that the apparently snowy summit was in reality composed of a white rock, and in the rugged cañons we picked up fragments which, when freshly broken, were as pure and white as the finest Carrara marble. Subsequent chemical examination proved it to be dolomite of the finest quality. This was the now celebrated 'Inyo marble,' which is found in numerous localities in the Inyo Range, from White Mountain south, one hundred miles or more."

Many other interesting and valuable facts regarding the minerals and metals found in these mountains were alluded to, and the paper concluded with an elaborate technical description of Inyo marble in which its microscopical characteristics were carefully noted. Some of the latter were shown under the society's largest instrument, and on the tables were arranged beautifully polished specimens of the following marbles alluded to in the paper: 1, Peperino; 2, Travertine; 3, Carrara marble; 4, California black marble; 5, Rosso Antico, ancient; 6, Rosso Antico, California; 7, Verde Antico, Italy; 8, Giallo Antico, California; 9, Sienna marble; 10, Oriental alabaster; 11, California onyx marble; 12, Pozzuolana, Italy; 13, Inyo marble; 14, Nerona marble.

---

ANDERSON'S MIXTURE FOR ECZEMA (DRY).—Pulverized starch oz. 1; oxide of zinc dr.  $\frac{1}{2}$ ; pulverized camphor oz.  $1\frac{1}{2}$ . Mix and make into a perfectly dry powder. Dust the affected skin thickly and frequently.



## Gleanings.

AMPUTATION OF THE PREGNANT UTERUS.—As statistics accumulate the results of the Porro operation and its modifications, which have for their end the amputation of the pregnant uterus, are shown to be very encouraging, and by far more successful than the old classical Cæsarian section. The superior advantages of the Porro operation seem to commend themselves to those surgeons who have had experience with both methods. As an illustration of this fact we have before us the experience of Mr. Lawson Tait (*British Medical Journal*, April 10, 1886, page 694), whose well-known skill in abdominal surgery is recognized throughout the civilized world. Mr. Tait read a paper on this subject before the meeting of the British Gynecological Society, held March 10th, 1886, in which he states that his experience in meddling with the pregnant uterus by abdominal section consisted of five cases: three of these were the ordinary Cæsarian section, and two were Porro's operation. Of the three Cæsarian sections all the mothers died, and only one of the children was now living. These results were such as to determine him absolutely never to operate by this method again. This determination was strengthened by the fact that both of his Porro cases recovered. Mr. Tait draws a distinction between the cases where the pregnant uterus was removed before the completion of gestation for some reason other than that of pregnancy, and those cases where the uterus was removed at or very near the time of labor, on account of difficulty in accomplishing delivery by the natural method. One of the cases reported by Mr. Tait belonged to the former category, the second was a "true Porro." In his first case a cystic sarcoma of the uterus was the cause of trouble; the patient was between four and five months pregnant. The entire uterus was removed. The clamp came off on the ninth day. This operation was performed in August, 1884, and at the date of writing (March 10th, 1886,) there was no return of the disease. In commenting on this case Mr. Tait expresses the regret that Dr. James Blundell had not lived a half of a century later than he did, or that he had not possessed the courage of his opinions. "There was hardly one of the recent advances in gynecology that was not to be found in anticipations of his writings." Blundell was the first to suggest the total removal of the

uterus. Mr. Tait condemns the Cæsarian section in the following language: "The mortality of the Cæsarian section is a long way over 99 per cent., and in itself it is essentially an immoral proceeding. It is primarily and chiefly based on the medical belief that any risk to the mother ought to be encountered in order to save the child, even if that child only lived long enough to be baptized. This is an immoral principle upon which to decide a surgical question, and it is economically wrong. But the chief immorality of the ordinary Cæsarian section is, that all of the .029 cases of recovery are left to tumble into exactly the same awful trouble immediately after they have recovered from their first ordeal; and, as a matter of fact, many such cases are known where the Cæsarian section has been repeated on the same patient a second and even a third time. I think the time has come to protest against such practices."

Impressed with these convictions, Mr. Tait removed the ovaries in his last case of Cæsarian section, which was performed in 1880. Mr. Tait takes very strong ground in favor of the Porro operation. "He was convinced that if he had a hundred cases of Porro's operation, such as that about to be described, before the obstetric art had been exhausted on them, there would not be more than five deaths in the series. He believed that in any case where the impediment to delivery was such as to require the destruction of the child, and to require this inevitably in a subsequent labor, the performance of Porro's operation as a first step would be by far the best decision in the interest of all concerned."

The following report of Mr. Tait's second case will be read with interest: "E. D., aged 33, who had been married five years, was taken in labor with her first child at 2 P. M. on January 8th. A leg presented. On examination, it was found that, whilst there was plenty of room on each side of the pelvis, the inlet was absolutely blocked by a prominence of the sacrum closely approximating the symphysis, and that the limb had passed on one side of this projection. It was determined to perform Porro's operation. This was done in the following way. An incision was made in the middle line, a little short of four inches; and as soon as the peritoneum was fully laid open, a loop of India-rubber tubing was passed over the fundus. It was then passed down as far as possible into the pelvis, and tied tight. A small incision was made into the uterus, and, as recommended by Dr. Godson, enlarged sufficiently by tear to enable the child

to be grasped. The child, a fine boy, was easily delivered, and as he emerged, hardly a drop of blood was lost. The uterus was then pulled outside, Kœberlé's wire clamp applied, the elastic ligature removed, and the wound stitched up. The whole operation did not take more than ten minutes, and nothing could be easier than its steps. The stump was dressed with perchloride of iron and iodoform. The only trouble was with the clamp. The tendency of a uterine pedicle was always to shrink; and, although it was tightened in this case at the time of the operation as much as was safe, the shrinkage caused bleeding in a few hours, and this occurred several times, so that the screw had to be tightened up. He believed the pedicle would be best treated by means of the cautery. The cautery failed in hysterectomy, because there was nearly always some enucleation in the removal of uterine tumors, and, therefore, when the stump was relieved from the cautery clamp, the inside bled. In a pregnant uterus this would not be the case. No kind of treatment by the ligature would be safe, owing to the shrinkage. If the pedicle could be treated by the intraperitoneal method, the mortality might be reduced to something approaching that of ovariectomy. If, however, experience should determine that the extraperitoneal method was necessary, the mortality would probably never fall below 15 or 20 per cent."—*Maryland Medical Journal*.

---

## Book Notices

---

THE PRINCIPLES AND PRACTICE OF MEDICINE. By the late Charles Hilton Fagge, M.D., F.R.C.P., Physician to, and Lecturer on Pathology at, Guy's Hospital; Examiner in Medicine in the University of London, etc. Including a Section on Cutaneous Diseases, by P. H. Pye-Smith, M.D., F.R.C.S., Lecturer on Medicine at Guy's Hospital. Chapters on Cardiac Diseases, by Samuel Wilkes, M.D., F.R.S., Physician to Guy's Hospital and to the Royal Hospital for Children, London. And Complete Indexes, by Robert Edmund Carrington, M.D., Assistant Physician to Guy's Hospital. Volume II. Large 8vo. Pp. 883. Philadelphia: P. Blakiston, Son & Co. Cincinnati: R. Clarke & Co.



We noticed the first volume of this splendid work on the Principles and Practice of Medicine in the March issue of the MEDICAL NEWS. We then spoke of it as the most philosophical and scientific Practice of Medicine with which we were acquainted; that, to a far greater extent than any other of its class, it set forth the principles of medicine, exhibiting to students and practitioners the reasons for the administration of certain remedies for particular diseases or morbid phenomena. An examination of the second volume, received since the appearance of the notice of the first volume, confirms the high opinion we formed of the work. There has been no work issued for a long time upon the Practice of Medicine that bears, in such a marked manner, evidence of being an original work—a work that the views expressed in it are the results of elaborate logical thought and personal research. The reading of a few pages upon almost any of the diseases treated, especially in the discussion of the pathology and treatment, shows the author to be an independent thinker—one who forms his deductions from his own researches.

No one had a higher standing among English physicians than Dr. Fagge. During his life he held many important official positions in various societies and hospitals, among which may be named the Royal Medico-Chirurgical Society, and the Clinical and Pathological Societies of London. He was Examiner in Medicine in the University of London, and at various times Lecturer on Pathology, Demonstrator of Pathology, Curator of the Museum, Physician to, and Registrar of, Guy's Hospital, Senior Physician to the Evelina Hospital for Sick Children, and to the Bournemouth Sanitarium for Consumptives, etc. It is stated of him that he was familiar, beyond most, if not all, of his contemporaries, with modern medical literature. He wrote extensively, few medical writers of his age being more frequently quoted than he. The last work written by him was his Practice, which he did not live to see published—several of his confreres preparing his manuscript for the press. His eminent biographer says of this, his last work, that it will probably be admitted to be a "fuller, more original, and more elaborate text-book on medicine than any that has yet appeared." Every physician should have a copy of it.



A MANUAL OF SURGERY. In Treatises by various authors. In three volumes. Edited by Frederick Treves, F.R.C.S., Surgeon to and Lecturer on Anatomy at the London Hospital. Volume I., General Surgical Affections, The Blood-vessels, The Nerves, The Skin. Volume II., The Thorax, The Organs of Digestion, The Genito-Urinary Organs. Volume III., The Organs of Locomotion and of Special Sense, The Respiratory Passages, The Head, The Spine. Duodecimos. 1,866 pages. 213 engravings. Per Volume, cloth, \$2. Philadelphia: Lea Brothers & Co., 1886. Cincinnati: R. Clarke & Co.

This is a splendid work upon surgery for medical students in attendance upon lectures. By being divided into three volumes, either one of them, while being used, can be carried in a side-pocket for convenient consulting whenever it may be desired to refresh the memory. This portability of the volumes will often, too, subserve the convenience of practitioners, for it not unfrequently happens that they are so situated that great assistance would be afforded them if a surgical work could be taken from the pocket and consulted.

The three volumes contain 1,866 pages, closely printed in brevier type. It will thus be perceived that the work is not an abbreviated one—containing but an outline of the subjects treated—but is as full in details as any of the ordinary works upon surgery. No student or practitioner will need a more prolix text-book upon surgery. Whenever more of detail will be desired upon any subject the student will seek a monograph.

Medical students are greatly indebted to the Messrs. Lea Brothers & Co., for the series of duodecimo works they have been issuing for their use. Such a series has long been needed, for they so well subserve convenience and assist in economizing time.

We had almost forgotten to draw attention to the fact that, in the work before us, thirty-three eminent gentlemen have contributed the matter composing the work, Mr. Frederick Treves, F.R.C.S., editing the whole. This fact makes the work more valuable, for to each gentleman were assigned those subjects which he was especially qualified to treat.

---

THE PRINCIPLES AND PRACTICE OF SURGERY. By Frank Hastings Hamilton, A.M., M.D., L.L.D., late Pro-

fessor of Surgery with Operations, and of Clinical Surgery in Bellevue Hospital Medical College, Consulting Surgeon to Bellevue Hospital, etc. Illustrated with 472 Engravings on wood. Third Edition, Revised and Corrected. 8vo. Pp. 989. New York: William Wood & Co. Cincinnati: P. C. G. field. Price, cloth, \$5.50; leather, \$6.50.

It has been the purpose of the author, in preparing this work, to supply, within the compass of a single volume of moderate size, the instruction necessary to a full understanding of all the subjects belonging properly and exclusively to surgery: the volume being intended as a text-book for students, and, at the same time, as a direct and complete guide to the surgeon. In short, it has been proposed to supply to medical students and practitioners what they most needed.

The various departments of surgery have been treated as concisely as is consistent with affording a full and correct understanding of them. Established facts are stated fully and plainly, while discussions of unsettled and hypothetical questions are omitted. There will be found only such references to, and quotations from, other writers as may be necessary to confirm the correctness of the views of the author upon a subject. Much of the literature of surgery, consequently, is passed over.

When all unnecessary verbiage is avoided in describing a subject, it is often surprising in how brief a space a satisfactory account can be given of it. Prof. Hamilton, therefore, in writing this work, has succeeded by the plan he has adopted to present to the profession and students a very thorough, satisfactory work in a single volume. Having now reached a third edition is evidence that it is held in high esteem.

The third edition has been quite thoroughly revised, so that it represents the progress of surgical science to the present time. In preparing it, the author has adhered to his original plan to exclude all labored references to obsolete views, and to record only established facts.

---

**SURGICAL DISEASES OF THE KIDNEY.** By Henry Morris, M.A., M.B., F.R.C.S., Surgeon to and Lecturer on Surgery at the Middlesex Hospital, London. 12mo. 555 pages, with 6 Chromo-lithographic Plates and 40

Engravings. Cloth, \$2.25. Philadelphia: Lea Brothers & Co., 1886.

This work, like Treves' Surgery, which we notice in this issue of the MEDICAL NEWS, belongs to the series of "*Clinical Manuals for Practitioners and Students of Medicine*," published by the Messrs. Lea Brothers & Co., of Philadelphia. It contains a brief description of the normal regional anatomy, and a pretty full account of the malformations and other abnormal anatomical conditions of the kidney, subjects of much importance to the surgeon who is about to perform any operation on the organ; also systematic accounts of the injuries and diseases of the kidney; and of the methods of performing the several renal operations, namely, nephrectomy, nephro-lithotomy, nephrotomy, aspiratory puncture, and nephrorraphy. Under the diseases are included somewhat detailed descriptions of those affections of the kidney which are secondary to obstruction in, or operations upon, the lower urinary organs, such as suppurative nephritis, the various forms of urinary fever, hydro-nephrosis, and pyonephrosis.

The work being devoted to traumatic lesions and surgical diseases of the kidneys, the physician, of course, will not find described in it any of the special disorders of the kidney, as Bright's Disease, etc.; but it is the more valuable in consequence; for by having grouped by themselves the surgical affections of the organ, these can be treated fully and satisfactorily in a single volume of convenient size. The work will undoubtedly be popular with practitioners and with medical students in attendance upon lectures.

---

A HANDBOOK FOR THE INSTRUCTION OF ATTENDANTS ON THE INSANE. Prepared by a Sub-committee of the Medico-Psychological Association, appointed at a branch meeting held in Glasgow, February 21, 1884. 12mo. Pp. 137. Boston: Cupples, Upham & Co. Cloth.

This little work has been prepared to assist attendants on the insane to a due understanding of the work in which they are engaged. It is sought to give them such notions of the body and mind in health and disease, such instructions for the management of those maladies with which they are usually brought in contact, and such rules for their guidance in matters of every-day experience, as will enable them to do their work with greater intelligence and watchfulness.

While not proposing to be a scientific treatise, it gives such an outline of physiology, pathology, hygiene, mental phenomena, etc., as to make attendants more intelligent in the performance of their duties and more alive to the necessities of those of whom they have charge. For instance, under the head of digestion, the nurse is informed, among other facts, that among the insane the appetite often exceeds the digestive powers, which will result in disorder of the digestive functions, as shown by foul breath (which may also be due to other causes), a foul tongue, bitter taste, vomiting, pain or fullness in the region of the stomach, heartburn, eructations of gas, waterbrash, headache, etc. Also, he is informed that the mental condition of the insane is often affected by the state of the bowels, and that, consequently, careful attention in this respect is essential.

This little work should be attentively studied by every one, male or female, who proposes to nurse or attend upon the insane in either public institutions or at their homes. Superintendents of asylums should require their attendants to study it under their direction. Assistant physicians of hospitals for the insane will also find in it much useful information.

---

**EPITOME OF DISEASES OF THE SKIN.** Being an Abstract of a Course of Lectures delivered in the University of Pennsylvania during the Session of 1883 and 1884. By Louis A. Duhring, M.D., Professor of Skin Diseases. Reported by Henry Wile, M.D., Clinical Assistant in the Department of Skin Diseases in the University Hospital. 16mo. Pp. 150. Philadelphia: J. B. Lippincott & Co. Cincinnati: R. Clarke & Co. Price 60 cents.

This little book contains sixteen lectures delivered before the Graduating Class of the University of Pennsylvania. For a work so small, the descriptions of the principal diseases of the skin are very satisfactory. The plan of treatment presented of each affection is also quite full and to the point.

A work like this is not designed to take the place of larger and fuller works, but yet it will be found very convenient for consulting in the way of refreshing the memory, and medical students in attendance upon lectures will find it quite useful.



LECTURES ON SYPHILIS. Delivered at the Chicago College of Physicians and Surgeons. By G. Frank Lydstone, M.D., late Resident Surgeon at Charity Hospital, New York City; Lecturer on the Surgical Diseases of the Genito-Urinary Organs and on Venereal Diseases in the College of Physicians and Surgeons. Reported by Wm. A. Walker, A.M., M.D., Attending Physician to the West Side Dispensary. 18mo. Pp. 184. Chicago: A. M. Wood & Co.

The Lectures composing this little work were originally published in the *Western Medical Reporter*. The object of their publication has been to present to the student a plain and practical idea of the subject of Syphilis, as taught by our most advanced pathologists and syphilographers, in conjunction with practical points drawn from personal observation in hospital and dispensary practice. Physicians and medical students will find in this little volume a very satisfactory exposition of the subject of syphilis, with an account of the most approved modes of treatment. It is sufficiently full to meet all the wants of the general practitioner.

---

### Translations from Our Foreign Exchanges.

---

Translated for MEDICAL NEWS, from the French, by Dr. Illowy,  
Cincinnati, Ohio.

---

THE NEW METHOD OF PROF. VULLIET OF DILATING THE  
UTERINE CAVITY, SO AS TO PERMIT OF OCULAR IN-  
SPECTION. BY BERTRIX, CHIEF OF THE  
CLINIC OF THE MATERNITY AT GENEVA.

At the meeting of the Medical Society of Geneva, of October, Prof. Vulliet read a paper concerning his method of continuous, progressive dilatation of the uterine cavity, a method he had inaugurated in his private practice, and which he had frequently employed in his gynecological service at the Maternity during the months of July, August, September and October, 1885.

Having had the advantage of acting as assistant of this service during this epoch, I desire, with the amiable authorization of Prof. Vulliet, to give some details of the methods of procedure of this progressive dilatation, and of the results obtained.

The object of this method is to render visible the internal walls of the uterus in their whole extent, to inspect the uterine cavity to the minutest uterine fold, and all this to the naked eye without the aid of any special optical instruments, the light of the sun, or the first lamp to hand furnishing sufficient illumination. Once the uterine cavity is open and dilated, it is possible to carry in, no matter to what part of its parietes, any instrument desired, bistoury, curette, hot iron, energetic carotic, with as much facility and precision as is done on any exposed part. It was due to this complete dilatation that it was possible to show Prof. Schiff a uterus in a state of menstruation. The blood was seen flowing from the wall in the form of a very fine capillary hemorrhage; it was a true sickering, very slow, and very regular.

The idea immediately came to give the impression of these dilated cavities by demonstrative and indisputable proof by photographs and casts.

Prof. Gosse, who has taken such great advantage of photography in his demonstrations of legal medicine, had the kindness to make several essays, and finally obtained in fact several proofs which, without being very clear, are still sufficiently comprehensible to persons who have seen these cavities themselves. The first reproductions were made in the lecture-room of the Maternity, an apartment very poorly lighted. They were obtained by illuminating the uterine cavity with a simple mirror reflecting the sunlight. Other proofs were made by a photographer of our city with a more suitable apparatus, and in a place better supplied with light. They are very clear, but will not be comprehended unless placed beside the casts of these cavities, and are insufficient to illustrate and to complete a description, or a scientific work.

There are some special difficulties in the way of this reproduction. Firstly, the deep red or roseated color of the walls is not the most favorable for photographing; further, the uterine cavity following immediately that of the vagina, and these united cavities forming a sort of long and narrow canal, the absence of different planes makes it impossible to reproduce the perspective, whence there results a flat image, without any clear indication of depth, and where everything is on the same plane, even if a tampon is placed at the bottom to indicate the cavity, still the image is not very demonstrative.

The casts of these cavities have succeeded much better. Whether caoutchouc or plaster be used, we have succeeded in obtaining excellent reproductions. Unfortunately the applications of the plaster, and especially the extraction of the hardened casts are painful, and we were for these reasons not able to apply it to all cavities.

Dr. Vulliet presented these photographs and casts to the Medical Society, with the patient whose cavity was reproduced in plaster; and every one present could convince himself of the exactitude and absolute conformity of the model and of the reproduction, the latter showing all the asperities and all the minutest details of the surface of the walls, among others an old tear in the uterine neck, in a most remarkably clear fashion.

As to the dilatation itself, this is the method of procedure: The position to be given to the patient is of capital importance. The most preferable one, I would even say indispensable, is that of Bozeman, or the genu-pectoral position, the seat being very much elevated and in face of the light, and the loins very much bent, forming a veritable saddle-back. The first few times it is very difficult for the patient; but with a little good will and patience, she soon becomes accustomed to the position, and will take it herself in a most exact manner. The woman should also be instructed how to carry the buttocks to the right or left by moving the head and chest, so that the different parts of the cavity may be alternately illuminated by the light, and rendered perfectly visible.

The perineum must be strongly elevated by a Sims speculum—as large a one as possible.

In cases where the pathological process that necessitates or justifies the dilatation has not yet opened up the cervix more or less high, the dilatation will be commenced by introducing into it the instrument which will penetrate it most easily, uterine sound, urethral bougie, sound for intrauterine injection, branched dilators, etc.; whatever is at hand can be used, augmenting the volume of the instrument little by little, and choosing for each particular case that instrument which will best adapt itself to the dimensions and tortuous or straight form of the cervical canal.

A certain degree of dilatation having been once obtained, the process becomes the same as when the cervix is already normally or pathologically dilated; that is to say, it is now when the intrauterine iodoformed tampon comes into action.

These cotton tampons have dimensions that vary from the size of a large pea to that of an almond; a double thread is attached to them in the middle; they are prepared by plunging them into a ten per cent. ethereal solution of iodoform, and drying them quickly, by rapid agitation in the air; they are then preserved in a well-stoppered bottle.

The method of introducing them is as follows: They are carried to the entrance of the orifice by means of very long and fine dressing forceps, curved or with an elbow; thence they are pushed, little by little, into the uterine cavity with a resistant metallic bougie having the curvature and volume of the sound for intrauterine injections. The tampon should pass the internal orifice and penetrate completely into the cavity.

The strings attached to the tampon hang outside of the vulva. They can be united by tying them all into one knot; and in this way it will be easier to remove them in order to change them, or to withdraw them into the vagina, if they should inconvenience the patient too much.

Thus, at the first sitting, we may introduce three or four, or even more, of these tampons. They are allowed to remain for twenty-four or even forty-eight hours.

At the end of this time the tampons are withdrawn, the cavity is washed out, if it appears necessary so to do, and they are immediately replaced by others, and by a greater number—a number *which should be augmented at every sitting*; and the cavity must not remain completely vacant, if we do not want to lose the vantage gained.

Generally, the uterus will show a great tolerance for these tampons; ordinarily they cause no disturbance at all. Sometimes, however, colics may be excited, but only at the outset of the dilatation, and they are of short duration. In one of his patients Prof. Vulliet observed nausea to supervene, analogous to that observed at the outset of pregnancy. After the first sitting there is sometimes observed a slight elevation of the temperature, but this does not last longer than one or two days. I have never observed chills.

If, from some cause or other, it should become necessary to hasten the beginning of the dilatation, to get more rapidly over the first stages, the following method can be followed: After having employed for a day or two the iodoformed tampons, profiting from this, that the uterus is in a state of perfect asepsy, we then introduce the expansible disinfected bougies (preferably a bundle of three or four laminaria).



After twenty-four hours these are removed, the cavity washed with a sublimated solution, and the cotton iodoform tampons again introduced.

The laminaria have this advantage over the cotton tampons, that they enable us to pass rapidly the first period of the dilatation process, and that they bring about an expansion regular in caliber. They are well suited for rapid dilatation. On the other hand, they occasion a traumatism, are much more difficult of toleration by the patient than the cotton ones, are frequently intolerable; they often expose the patient to grave accidents, and then it is impossible to have the sticks completely aseptic. I can say as much of the prepared sponges, because they have the same inconveniences. It is therefore necessary, if they have been employed, to wash out the cavity most carefully with an energetic antiseptic, preferably a solution of sublimate, 1 to 1000.

For slow dilatation the cotton tampons will suffice, and constitute a much more anodyne method. If they prove too slow, or too irregular, the laminaria can be used at one sitting, with an observance of the necessary precautions.

Thus the uterine cavity is sealed, like a dentist seals up a hollow tooth. The cavity yields, distends little by little, and we take possession of the space gained by augmenting continually the number of the tampons, until the dilatation be such that, when the cotton is withdrawn, and the air fills the cavity, the sight can inspect the whole extent of the walls, and penetrate to the very fundus of the uterus; that the cavity of the same, and that of the vagina, should seem to form one continuous canal.

It may happen that, in a certain case, the external orifice resists, and that the dilatation is more pronounced in the interior than at the orifice of the neck. This would naturally render inspection impossible. This resistance can be overcome by means of a very large tampon of conical form, which is introduced into the cavity in such a way that the base of the cone does not penetrate entirely into the uterine orifice.

When the dilatation is completed and regularly established, the cervix is effaced; and, if it be not hypertrophied, it does not form more than a very slight projection, which is not the least obstacle to the inspection of the cavity.

Prof. Vulliet has not applied his method unless it was necessary and for the benefit of the patient, believing that we

should abstain from all experiments which have no other purpose than to show the skill of the operator; when the introduction of the curette, or of the finger, sufficed for the treatment, the dilatation was not pushed beyond the degree necessary.

In accordance with this principle, Prof. Vulliet has not, up to the present day, applied his method, except to many cases of cancer of the uterus, to three cases of intraparietal fibrous polyps which projected into the uterus, to two voluminous fibromyomata, and to one or two cases of endometritis.

As to the time required for the complete dilatation, it varies in different patients according to the state of the uterus, and the degree of resistance of the cervix. Thus, for instance, in the case of one cancerous patient, in whom the dilatation was begun on the 7th, the whole cavity was clearly visible on the 16th of the same month. In another patient the process required twenty days. On the other hand, in the case of a fibrous polyp, the whole cavity, with the tumor projecting into its interior, was clearly visible on the third day. In those of Prof. Vulliet's patients in whom the uterus was most normal and resistant, and in whom the lips of the cervix were most intact, it required, renewing the tampons about every second day, five weeks to obtain a dilatation that permitted a complete inspection of the cavity. It is true that this was the first case—the debut of the method. In general, we may count upon two weeks to accomplish our purpose. In aged people, in whom the genitals are atrophied, we are frequently obliged, before getting to the uterus, to dilate the vulva and vagina by means of large tampons iodoformed or soaked in spirits of turpentine.

Once the dilatation is effected, it may be maintained for a long time. In one case it persists since a year; in another case since three months and more. The uterus contracts and comes back to itself as soon as the quantity of cotton is diminished; and enlarges more easily and rapidly than the first time, if the number of tampons be again augmented. Even if the perfectly dilated uterus be left in a condition of repose, it takes quite a time, sometimes several weeks, till it resumes its normal capacity.

In one word, it can be readily seen from these brief remarks that continued uterine dilatation is perfectly practicable. I would even say easy; but it is certainly frequently

very tedious, and necessitates much patience on the part of both doctor and patient. In many gynecological cases it may be of the greatest service, not alone as a means of confirming a diagnosis, but also for the purpose of applying direct and local treatment under the control of the eye; something which, up to now, was extremely difficult. Prof. Vulliet has been able, thanks to this dilatation, to apply to uterine carcinoma a very energetic treatment, analogous to that of Marion Sims. In several cases the results have been very remarkable, at least so far as we were able to judge after three or four months. The condition of the patient was ameliorated in the sense that the hemorrhage, the fetid discharges and the infectious odor were suppressed, results which are certainly not to be despised, because it gives back to these unfortunates the social life.

The permanent dilatation is an acquisition to gynecology which leads us far away from the epoch when the entrance of air into the uterus was regarded as very dangerous. It will greatly facilitate the local therapeutics of a number of uterine affections, and will in the future find perhaps more and more frequent application.—*Nouvelles Archives d'Obstetrique and de Genec.*, No. 1.

---

## Editorial.

---

THE AMERICAN MEDICAL ASSOCIATION. — The thirty-seventh annual meeting of the *American Medical Association* convened at St. Louis on Tuesday, May 4th. It continued for four days, viz.: during May 4, 5, 6, 7. The Exposition Building was the place where the meetings were held.

Dr. Le Grand Atwood, Chairman of the Committee of Arrangements, called the Association to order, at 11 A. M., on the first day, and introduced the President, Dr. Brodie. Prayer was offered by Rev. M. Schuyler, D.D., of the Episcopal Church. The address of welcome was made by the Mayor of the city, Hon. D. R. Francis.

The Hon. Mr. Francis made quite an interesting address. He had the appearance of being a young man, about 23 or 24 years of age. He is small, and weighs, we should judge, about 130 pounds. He spoke of St. Louis as being the healthiest city in America, and seemed to think that, on that account, it was a very appropriate place for the Association



to hold its meeting. He said, "*Si locum salubrem invenire voletis, circumspectate.*" (If you seek to find a healthy place, look about you.)

Protests were filed against delegates from the following organizations taking seats: Philadelphia County Medical Society; Davidson County, Tenn.; The Tri-State Medical Society; The Mississippi Valley Medical Association; The Tennessee State Medical Society. They were all referred to the judicial committee. If we remember rightly, none of the protests were sustained except the first mentioned.

The following gentlemen were elected members by invitation: Drs. Manfred Johnson, McHenry, Illinois; W. W. Morrison, and H. G. McKellops, of St. Louis, Mo.; W. H. Atkinson, New York; J. A. Thacker, Cincinnati, O.

Dr. Brodie, the President, in his address, stated that no epidemic had visited our country during the year. He spoke of a number of honored members of the Association who had died since the last meeting, as, Drs. W. K. Bowling, of Tennessee; John L. Atlee, of Pennsylvania; and Austin Flint, of New York. He then reviewed the organization of the Association from the original motion of Dr. Isaac Hays, at the National Convention in New York, in 1846, through the successive steps to the completion of the formation of the Association at the first meeting in Philadelphia in 1847. Upon this organization has arisen the most important medical association of this country. The resolution of Dr. Hays led to the formation of a harmonious organization of the medical profession of the entire country, and also to the adoption of a National Code of Ethics. Only four of the original pioneers of the Association are now living, of whom two have been honored with its presidency—Alfred Stille and N. S. Davis. Twenty-two States and the District of Columbia were represented at the meeting held at Philadelphia in 1847, under the Presidency of Dr. Nathaniel Chapman.

Of all the State Medical Societies which have adopted the Code of Ethics, but one, that of New York, has repudiated it. To the honor of the profession of the State, be it written that the majority of the profession of that State have repudiated the action of this Society. Of the original committee which framed the Code of Ethics, only one member is now living—Dr. Alonzo Clark, of New York.

He recommended that the Association express its approval of the proposed investigation of the cause of yellow fever at



the expense of the National Government. He stated that the *Journal* of the Association has thus far been successful, financially and otherwise.

Dr. Brodie very emphatically denounced as derogatory the indorsement, in any manner, of proprietary medicines; and he held that practically there is no difference between patent and proprietary medicines, and that disgrace should rest upon the name of any man who allowed his name to be used in connection with the advertisement of proprietary preparations. He said that although the manufacturers of proprietary remedies pretended to disclose the ingredients of them, yet they kept secret the proportions of them, or the mode of compounding them, or both. He considered them injurious to the community and to the profession, and should be discountenanced by all respectable physicians.

On the *second day* of the meeting of the Association, Dr. N. Senn, of Wisconsin, read an address upon Surgery before the whole Association. Dr. S. C. Gordon, of Maine, delivered the address upon Obstetrics. He said that the year just passed had yielded no remarkable discoveries in either obstetrics or gynecology. He therefore confined his remarks to subjects which had been discussed in the journals during that time, and considered them in the light of experience. Old theories in medical science are being constantly exploded, and of this a good example was presented at the last meeting of the Association. It had long been held that a physician who was attending a case of scarlatina was unfitted for duty as an accoucheur; but Dr. George F. French, of Minnesota, showed, at that time, the fallacy of this view and the power of disinfectants.

He next discussed the early signs of pregnancy, and stated that he had found the test proposed by Hégear valuable, and applicable at an early date. Campbell's method of relieving the vomiting of pregnancy by postural pneumatic reduction was approved. For induction of premature labor he prefers retention of the sound to rapid dilatation. Anesthesia and the forceps have done much to relieve the suffering and prevent the dangers of the parturient state; and under the judicious use of the forceps, vesico-vaginal fistula is becoming infrequent.

Dr. A. L. Gihon, U. S. N., reported that the committee on the Rush Monument had organized by the election of Dr. G. H. Róhe, of Maryland, as Secretary, and Dr. J. M. Toner, of Washington, as Treasurer; that a local committee

had been appointed, and also a general committee of one from each State.

On the *third day* of the session the Special Committee on the President's Address reported: They advised that the Association without delay memorialize Congress in behalf of the pending resolution to appoint a scientific commission consisting of three members of the medical profession, to visit the *habitats* of yellow fever, with the view of determining the validity of the claims of Drs. Carmona and Freire to have discovered the means of preventing or modifying the attacks of the disease.

Among several other subjects discussed in the President's Address, the committee strongly expressed themselves as indorsing the views expressed by the President in regard to Proprietary Medicines. They said that the Association should emphatically denounce the indorsement by certificate, advertisement, testimonial, or indirect approval of any form of proprietary remedies and appliances, and should instruct the judicial council to take action in all such cases without formal presentation of charges. That, in the words of the President, "The stigma of professional disgrace rests upon any regularly educated physician who allows his name to be advertised as indorser of any patent, secret, or proprietary medicine."

Dr. John H. Ranch, of Illinois, delivered an address upon State Medicine. He took the ground that the best interests of the public welfare demand the highest attainable standard of educational qualifications, skill, ability, high professional and personal honor, integrity, and morality. He then proceeded to assert that it was the duty of the State to exercise the inherent plenary power and authority which it possesses for the protection and promotion of the public welfare, to secure such a standard. And he continued to say that uniform State laws should be enacted, exacting of every aspirant to the practice of medicine proof of his professional fitness.

He suggested specifically that the Association put itself on record at this session by recommending the extension of the period of study to four years, and the attendance upon lectures to three full terms, with ample hospital and clinical instruction. Also, that the Committee on State Medicine be instructed to frame regulations for the practice of medicine, which should be indorsed by the Association, as the standard to which all existing legislation should be made to conform as speedily as practicable, and which should be

urged for adoption upon all States where no such laws already exist.

Dr. Ranch expressed the conviction that cholera, small-pox, and yellow fever may be excluded from the United States by intelligent use of the agencies at our command. He spoke with earnestness of the necessity of national control over immigration, as the question is becoming daily, hourly, more urgent. How much longer, he asked, will it be safe or prudent to permit the unrestricted influx of the vicious, insane, pauper, and infected immigrants into our midst? He closed his address with a quotation from an annual report of the Illinois State Board of Health, showing the advantages in vaccination of humanized virus over bovine, regarding promptness and certainty of action, particularly in cases of emergency.

On the morning of the *fourth day*, General Sherman having been noticed by the President to be in the house, was invited to take a seat upon the platform. He spoke a few words of compliment and respect. He referred to his own observations of the labors of the surgeons in the late war, and closed by assuring the Association of its cordial welcome to the homes of St. Louis, and expressing approval of such general assemblages of scientific men, which can only result in profit to the public as well as to themselves.

Dr. Eugene Smith, of Michigan, read an address on Ophthalmology. He advised that, in all cases, cocaine should first be tried at a strength of one per cent., until its action on the patient should be demonstrated; and then it may be increased, if advisable, to three or four per cent.

He stated that recent experiments had placed the operation of transplanting the conjunctiva of the rabbit upon the human eye among the recognized operations.

Cocaine, he continued, has taken its place in the treatment of painful affections of the ear. A four per cent. solution is usually employed. Bad symptoms have followed its use in but a few cases.

The following gentlemen were elected officers for the ensuing year:

*President.*—E. H. Gregory, M.D., of St. Louis.

*Vice-Presidents.*—Drs. B. H. Miller, of Michigan; W. B. Welch, Arkansas; Wm. H. Pancoast, Pennsylvania; W. C. Wile, Connecticut.

*Permanent Secretary.*—W. B. Atkinson, M.D., of Philadelphia.



*Assistant Secretary.*—J. Nevins Hyde, M.D., of Chicago.

*Treasurer.*—R. J. Dungleson, M.D., of Philadelphia.

*Librarian.*—C. H. A. Kleinschmidt, of Washington.

Chicago was selected as the place to hold the next annual meeting of the Association.

The meeting at St. Louis was attended by the largest number of physicians than was ever in attendance at any previous meeting. There were present over 1,100 delegates from medical societies, and several hundred visitors from all parts of the country. Every one seemed to enjoy himself fully and to feel that it was good for him to be there. The entertainments given to delegates and visitors were all fine and very enjoyable affairs. The most perfect harmony prevailed, and we witnessed at no time any ungentlemanly behavior. Many valuable papers were read before the Sections, and the work done by the Sections, as has been stated, will compare favorably in quality with that of any of the general organizations of specialists in this country.

---

MEDDLESOME MEDICAL LEGISLATION.—We learn from the *Medical Times* that the King of Servia (which is a tributary, we believe, of Turkey, in the southeast portion of Europe) has issued a decree in the following language: "Whereas it is irrefutably proved by science that the so-called antiseptic treatment of wounds yields more beneficial results than all other methods, we are pleased to order that, henceforward, the said antiseptic plan of treatment be solely employed in all the hospitals of our kingdom, and that corrosive sublimate and iodoform be used until our further disposition."

We indorse the antiseptic method of treatment, as is shown by an editorial in this number of the *News*, but we are opposed to king, president, governor, general, or legislature, by edict, command, order, or law, undertaking to say what a physician shall prescribe or shall not prescribe, or what plan of treatment he shall pursue in certain cases. It will be remembered that, during the late war, when Surgeon-General Hammond was at the head of the Medical Department of the United States Army, he assumed to limit the prescribing of certain remedies, and those officers whose duty it was to supply drugs to the surgeons of regiments were forbidden to fill orders for such medicines. A feeling of indignation among the medical men of the army was im-



mediately excited and strong protests were made. Indignation was also felt by all the physicians in civil life, and meetings expressing it were held throughout the country. We recollect of attending such a meeting that was called in Cincinnati, and can call to mind the speeches that were made disapproving the assumption of any one to dictate to a physician or surgeon the course of treatment he should pursue under given circumstances. The remedies which Surgeon Hammond disapproved were of a kind that practitioners generally regarded as injurious in their effects in the treatment of many of the diseases to which those in the army were subject, yet a feeling of indignant opposition was excited to the claim of any one to interfere with a medical man's right to treat a disease according to his judgment, enlightened by his study of medical science and by his experience. It was felt that if those physicians then serving in the army could not be trusted with the dispensing of such powerful articles of the *materia medica* as calomel, tartar emetic, etc., they were not fitted for the positions they were holding, and should be dismissed and their places filled by others better qualified. If they would do damage with tartar emetic, if it should be within their reach, they would injure their patients with quinine by their unskillful employment of it.

A few years ago a member of the staff of the Cincinnati Hospital very properly resigned because the trustees of that institution undertook to dictate to him in regard to prescribing quinine. It might have been that, in some cases, another remedy would have fulfilled the indications of treatment equally as well, but he felt that if he was to be held responsible for the results of his treatment, he could not permit himself to be hampered in prescribing in the least—he must be allowed to choose such remedies as his judgment dictated to him to be proper.

Any legislation that tends to embarrass a medical man in treating diseases, according to his judgment, must be regarded as evil and mischievous. We understand that, with some of the States of this country, there is a disposition to enact laws which, indirectly, will have this effect.

---

SALICYLIC ACID AND SALICIN IN THE TREATMENT OF ACUTE RHEUMATISM.—Being curious to know in what estimation Dr. Fagge held salicylic acid as a remedy in acute

rheumatism, we turned to page 554, Volume II., of his highly distinguished work on "The Principles and Practice of Medicine," which has just been published in England and in this country, and which is regarded as the most original work of its kind that has been issued for a long time.

Under the head of Salicin, on the page mentioned, he says, in speaking of the treatment of rheumatism: "I think I can show that the duration of the disease may be greatly shortened by the administration of certain remedies which have been recently introduced, viz.: Salicylic Acid and Salicin. It was in January, 1876, that Dr. Stricker first prominently drew attention to salicylic acid, which had been used there for some months previously; the same medicine, however, had been previously employed at Basle by Buss. Salicin was originally advocated by Dr. MacLogan, of Dundee, in March, 1876, in the *Lancet*; he had first prescribed it in 1874. Among the Hottentots and Boers of South Africa willow tea has, according to Mr. F. Ensor, long been a traditional remedy for rheumatism.

"When I first made trial of these drugs, I was for a little while skeptical as to their value. The patients rapidly recovered; but I could not forget that I had sometimes seen the administration of other medicines followed by results which appeared very striking. But when case after case recovered, with scarcely a failure, I became satisfied that I had a most potent remedy in my hands; and all further experience has strengthened me in this conviction. The immense majority of physicians and practitioners now, I think, entertain a similar opinion. I am not aware that any observer has in this country publicly expressed his dissent from it, except Dr. Greenhow."

Dr. Fagge gives a table of all the cases of acute rheumatism treated with salicylic acid and salicin occurring in Guy's Hospital from the spring of 1876 to the end of 1880. We have not room for the table, and therefore omit it. He proceeds to say:

"The symptoms were arrested within five days in no fewer than 180 of the 355 patients. It must be added that the rapidity with which relief is afforded to the joint pains is actually far greater than appears in the table. In many of the cases which are set down as having been relieved at the end of five, or six, or seven days, the patient within two or three days was almost without pain, or had almost a normal temperature, or was almost free both from pyrexia and from

pain. It is no uncommon thing for the patient to be conscious of experiencing great relief from the first two or three doses of the medicine ; and house physicians have repeatedly told me of this striking contrast, even on the first night after admission, between patients treated with salicylic acid or salicin and those to whom no medicine had as yet been administered ; the former lie quiet, even if they do not sleep ; the latter often shriek and cry out during nearly the whole night, disturbing every one else in the ward."

He states that the dose of salicylic acid which is adequate to arrest acute rheumatism with rapidity appears, as a rule, to be about twenty grains, given at intervals of two or three hours. But sometimes a larger quantity is required. He says that he had a patient who took twenty grains of salicylate of soda every two hours without any marked benefit for two or three days; but in whom the disease at once yielded when thirty grains were given. He states that it is generally necessary to use a larger quantity of salicin.

Dr. Fagge gives much more interesting matter as regards the use of salicylic acid in rheumatism, but we have not the space to spare to present the whole of it. We must refer the reader to his work.

---

ANESTHETICS AND ANTISEPTICS.—Prof. Hamilton, in the preface of the third edition of his work upon Surgery, says that it is within the period of his early professional life that anesthetics were introduced; and that it is within the period of his later life that antiseptics have been popularized. In speaking of the first, anesthetics, he says that while they have contributed greatly to lessen the sum of human suffering, they have, in a degree scarcely less marked, extended the range of useful surgical operations. And as regards antiseptics, he says, that it is claimed for them of having still further enlarged the bounds of legitimate surgery, and of giving extraordinary promise for the "surgery of the future."

We do not believe that since surgery has been cultivated as a science and an art, that any discoveries have so contributed to its progress as the discovery, in the first place, of anesthesia and afterward of the beneficial results proceeding from the employment of disinfection in surgical operations. If anesthesia had effected nothing more than causing insensibility in such operations as surgeons had been accustomed to perform, it might have been justly considered that



a great advance had been made, but great as that has been, it constitutes but a small part of the progress that has followed. Surgeons have found that they can perform operations for the amelioration of the condition of their patients without endangering life, that previously they would not have ventured upon. There is not a day that lives are not saved, and the condition of persons improved, by means of operations made possible by anesthesia. How great the number that formerly succumbed to the shock of the operation which they endured, that peradventure their lives might be saved. But how few now, comparatively, are the fatal results proceeding from shock. Within the lifetime of Prof. Hamilton and of others now living, it not unfrequently happened that the shock resulting from the pain inflicted in reducing a dislocation would destroy life. But anesthesia now not merely diminishes the perturbation by obtunding the sensibilities to pain, but, by bringing about relaxation of the muscles, it removes the conditions that would have produced pain even if the sensibilities had not been blunted.

But anesthesia has not been limited in advancing surgery by enabling the surgeon to perform capital operations when otherwise he would not have been able to perform them; by adding to the number of operations affording prospects of saving life or permanently benefiting the patient; by diminishing the danger to life from shock, etc.; but, in addition, it has effected much by enabling the surgeon to make examinations. Every day do surgeons employ anesthetics to facilitate making examinations. In fact, so accustomed are they to produce anesthesia previous to subjecting patients to the manipulations of explorations, they would be greatly embarrassed oftentimes if compelled to omit it, even though they could succeed without employing it. It is not necessary for us to mention in detail the examinations which surgeons are enabled to make carefully, without feeling the necessity of great expedition, after bringing the subject under the influence of chloroform. They will occur to the minds of all.

Surgery is not probably indebted to so great an extent to antiseptics for the advance that has been made by it, but undoubtedly it has received a great impetus to its progress by the employment of these agents in late years. Wounds have been made to heal without suppuration by the use of carbolic acid, when we know that this result would not have occurred under former methods of treatment. But the



greatest triumph that has resulted from the use of antiseptics in surgery, and an exceedingly great triumph it is, has been that of rendering certain operations comparatively safe that had previously been regarded as exceedingly fatal. Ovariectomy, a few years ago, was attended with so many fatal results that recourse was not had to it until the symptoms would permit of no longer delay. Probably not more than one out of three undergoing the operation recovered. But a few months ago, a distinguished ovariectomist of Scotland reported, if we remember rightly, over sixty consecutive operations performed by him without a single fatal result. In all of these operations he employed, from the very beginning, the carbolic acid spray—his sponges and cloths having been washed in a carbolic acid solution, and his knives treated by the same. Is it not fair to presume that the wonderful success that now attends this very capital operation, compared with that which formerly resulted, is due to the use of disinfectants in its performance from the beginning to the completion of it? Except in the use of these agents, the operation is performed in the same manner that it has always been. How great has been the success of Mr. Lister, in operations generally, as reported by him since he has been employing the carbolic acid sprays.

In conclusion we will allude to the success of the surgeon in preventing infection by the use of disinfectants, and thus is able to limit the spread of disease. He need no longer fear, by their use, of being himself the medium of transmitting the germs of disease.

We have in this article only made a very rapid and necessarily a very imperfect sketch of the advance made in surgery by the discovery of anesthesia and disinfection. Many more illustrations can be brought to the attention than we have mentioned, of their contributions to its progress.

---

HAS BECOME FINALLY RESIGNED. — A number of our Eastern medical brethren, presuming that they and they only were the medical lights of this country—that in them were embodied the learning and wisdom of the profession on this side of the Atlantic Ocean—went about electing themselves to all of the offices of the meeting of the International Medical Congress which is to be held in Washington in 1887, after the Congress had accepted the invitation of the

American Medical Association to hold its next session in this country. The Association very properly undid the work of these conceited gentlemen, devoid of the commonest modesty, and arranged that some of the honorable positions should be given to a few of the members of the profession outside of New York, Philadelphia, Washington and Boston. We have stated in previous numbers of the MEDICAL NEWS how terribly insulted our Eastern brethren became by this action, which intimated that there were physicians west of the mountains of as high standing as they were, and were nearly as intelligent. Almost to a man they resigned their positions, declaring that the Congress without them would be a failure, as the European delegates knew no one of the profession in this country but them.

But their places having been quietly filled, and the committees to arrange for the meeting of the Congress having proceeded right along undismayed by their resignations, they are beginning to feel that they have been making fools of themselves, and that their best policy will now be to make the best of circumstances. The noise of brag and threats to bring about the failure of the Congress have pretty much subsided, and a disposition is being exhibited of a willingness to occupy even back seats if they will only be kindly permitted to enter the building in which the Congress will hold its meetings when it assembles here in 1887.

To show the altered tone of the gentlemen who, a few months ago, were declaring that all of the medical lore of this country was to be found in New York, Boston and Philadelphia—that the profession west of the Alleghenies was composed largely of ignorant men, of whom scarcely any were above mediocrity—we have quoted a paragraph from an editorial in a recent number of the *Medical Record* of New York. The editor says:

“There will be a International Medical Congress, but, according to the present outlook, a Congress in which many of America’s best physicians will be absent. [Oh, dear!]

“Still we say to foreign delegates, You will meet a large number of able and hospitable gentlemen at the Congress, you will be made warmly welcome by all Americans, and you will hear no quarreling while you are in the States. We know that many medical gentlemen in New York, Philadelphia, Boston, and other medical centers, debarred from receiving guests in an official capacity, will be glad to wel-

come all foreign visitors unofficially and pay them every hospitable attention."

A short time ago this same editor was predicting disaster to the Congress, for no other reason than because the American Medical Association arranged that other physicians, besides those of the three or four Eastern cities, should hold official positions in the Congress—because all of the official positions were not to be occupied by members of the profession in New York, Boston and Philadelphia, since they only knew anything. Has not quite a change come over him?

---

THE DISPLAYS AT THE ASSOCIATION.—At the recent meeting of the *American Medical Association* at St. Louis, a room was set apart in the large Exhibition Building, in which the Association held its meetings, for the accommodation of manufacturing druggists, surgical instrument makers, book publishers, opticians, etc. The displays made by many of these were very handsome indeed. On going around inspecting one felt as if he were visiting an exposition of industry.

Among other manufacturing houses were those of Wm. R. Warner & Co., of Philadelphia; Parke, Davis & Co., of Detroit; Trommer Extract of Malt Co., of Fremont, Ohio; Lea Brothers & Co., of Philadelphia; Aloe & Co., of St. Louis, and many others. W. R. Warner & Co. made quite a handsome display. Their agent, a physician, whose name we can not, at the moment, call to mind, was exceedingly kind and obliging in exhibiting the preparations of the house. This firm are the pioneers in the manufacture of sugar-coated pills—sugar-coated pills which can be relied upon to dissolve in the stomach, which can not be said of those made by not a few firms. They also make bromo-caffeine, a very valuable preparation, ingluvin, an excellent digesting agent, a preparation of salicylates which we were told by those having used it is a remedy of great potency in chronic as well as acute rheumatism. But the house of Warner & Co. do not need any commendation. They are known everywhere as one of the most reliable manufacturing firms of this country.

The profession also know about Parke, Davis & Co., the Trommer Extract of Malt Co., etc. Importers for some time have been endeavoring to displace the preparations of the Trommer Co., but they will not be able to succeed.

The mere *beverages* which many of these try to palm off upon the profession will never be able to supplant the genuine Extract of Malt as made by the Trommer Co., which can be proven by actual experiment to contain diastase.

Our space will not permit us at present to describe the displays made by other representatives of manufacturing establishments.

---

OHIO STATE MEDICAL SOCIETY. — The forty-first annual meeting of this organization will take place at Akron, Ohio, June 2, 3, and 4, 1886.

The President is Dr. Wm. Morrow Beach, London; Vice-Presidents, Drs. H. Z. Gill, Cleveland; H. R. Kelly, Galion; Thomas McEbright, Akron; J. D. Robison, Wooster; Secretary, Dr. G. A. Collamore, Toledo; Assistant Secretary, Dr. E. C. Brush, Zanesville; Treasurer and Librarian, Dr. T. W. Jones, Columbus; Committee of Arrangements: Drs. Thomas McEbright, H. M. Fisher, E. W. Howard, C. R. Merriman, Daniel A. Scott.

The standing committees are as follows: Finance, Drs. S. S. Thorn, H. J. Sharp, G. S. Franklin, Davis Halderman, E. W. Howard.

Ethics: Drs. Dan. Millikin, R. H. Reed, W. J. Scott, J. A. Murphy, W. W. Jones.

Publication: Drs. W. H. H. Nash, W. J. Conklin, J. F. Baldwin, J. C. Culbertson, J. H. Lowman (and the President and Secretary *ex-officio*).

Admission and Medical Societies: Drs. P. P. Pomerene, C. A. L. Reed, S. W. Fowler, I. N. Himes, I. N. Beach.

---

INTUBATION OF THE LARYNX IN DIPHTHERITIC CROUP. — In a paper on this subject (*Medical Record*, April 10, 1886,) Dr. Dillon Brown sums up the following points:

1. All the cases were among children called foundlings.
2. The tube was inserted in *every* case of severe laryngeal obstruction that occurred in the asylum, without regard to its hopeless character.
3. One-third of the cases were babies aged sixteen, twenty-three, eleven, twelve, and five months respectively, an age at which recovery after tracheotomy is extremely rare.
4. Two (Cases V. and VII.) had tuberculosis, a disease which is in itself absolutely fatal.



5. One (Case III.) a rickety child, died of uræmic convulsions three days after the disappearance of all laryngeal obstruction.

6. The tube requires no attention after its insertion to keep it clean, and if a piece of pseudo-membrane should close it (which is not likely to happen), the tube is held in place so loosely that it would be immediately expelled.

7. The inspired air is warm and moist. This prevents the drying of the secretion in the tube.

---

ACUTE RHEUMATISM AND ITS CARDIAC COMPLICATIONS.—Dr. Bristowe, in opening a discussion in the Section of Medicine at the Annual Meeting of the British Medical Association in Cardiff, said that, assuming that we have a drug which is competent to arrest the rheumatic process, and that it is administered effectually before the heart has become implicated, it is obvious that the heart must share in the general benefit, and that the liability to heart disease, in such cases, must be lessened. If, then, the salicyl treatment is specific against rheumatism, as he believed it is, it must *pro tanto* be specific against the component parts of the disease, and, therefore, against its cardiac factor.

---

PEACOCK'S BROMIDES.—Dr. Fred. B. Wood says he has given Peacock's Bromides a thorough test, and is pleased to state that, after an experience of twenty-five years, he has never found any remedy which acts so surely as this preparation does. He is sure that in the near future, especially in the treatment of the diseases of the brain and nerves, it is destined to take the place of the older preparations, to the benefit of both physician and patient.

---

LACTATED FOOD.—Our readers should notice the advertisement of Wells, Richardson & Co. in the advertising pages. The preparation of Food made by them is very highly spoken of. By sending to them, mentioning the MEDICAL NEWS, specimens will be sent. Also pamphlets explaining qualities, etc.

# THE CINCINNATI MEDICAL NEWS.

VOL. XIX. No. 222. }  
Old Series.

JUNE, 1886.

{ VOL. XV. No. 6.  
New Series.

## Original Contributions.

### On the Cultivation of the Sense of Touch.

BY G. P. HACHENBERG, M. D., AUSTIN, TEXAS.

IN the early years of my practice I was impressed with the importance of the cultivation of the sense of touch for surgical and diagnostic purposes. I determined to give it a fair trial. In the first place I gave the most scrupulous attention to my hands, not only to keep them clean, soft and pliable, but strong and healthy. Outdoors I usually protected them with gloves. I washed them often in cold water, and used a mild soap for cleansing. Without a well-preserved hand the most delicate sense of touch can never be attained.

The first principle I followed in the practice of touch, was to have one made for each class of examinations, and not to deviate from it. The idea is to impose but one function on each method, and on that line run the cultivation, for to acquire various sorts of duties from one method of touch, would have weakened, or rather confused its highest sensibility.

On these grounds I adopted the following classification:

1st. The touch with the tip and inner surface of the end of the right index finger; for the examination of hidden parts, as the os tincae, rectum, throat, bottom of wounds, etc.

2. The inner surface of the ends of the index and middle fingers of the left hand, for the examination of external parts of the body—for fluctuations of various kinds, œdema pulsations, to determine the character of early cutaneous eruptions, as in smallpox, etc.

As the high degree of sensibility of the left index finger can not be attained as in the right (except in left-handed persons), the middle finger is joined with it. Frequently I use the ring finger in place of the index, and think it better not to use the left index at all, that the concentration in the right index may not be interfered with.

3d. The right little finger, for the examination of sinuses, fistulæ, gunshot wounds of shallow penetration, etc.

4th. By palpation with the whole palmar surface of the left hand, and where it is necessary to join it with percussion, use the ends of the middle and ring fingers of the right hand for that purpose. In this operation never use the right index finger, for reasons already assigned.

5th. By the grip, using one or both hands.

6th. A slap with the hand.

It is well to fix the applicability of each method given. You can use the first touch in detecting an embedded needle under the skin, for in that case you may need the keenest and best under your command; but never use it in fluctuations, as the finger is only to determine the outlines of hidden things, or to reveal the relation of the parts. You would not apply the second touch in place of the first, where the former is so useful in detecting fluctuations, and in locating a ball in the flesh. You can lay your hand over the chest, and thereby ascertain in a great measure the character of respiration, or the action of the heart; but you would hardly resort to the same method in the examination of the abdomen, unless you make it manipulatory, or, in other words, change it into a gentle grip. The fourth touch is often resorted to in ascertaining the temperature and humidity of the skin. Where palpation is made on the forehead, either hand can be used; where the right hand is used, the index finger should not touch the skin.

I will give a few cases in my experience to show the importance of our subject.

In a Military Hospital I was requested to see a patient who had been shot in the hand, resulting in an extensive inflammation and suppuration. Incisions had been made into the enormously tumefied hand, in search of the ball, but without success. I passed my fingers of the second touch along the inner surface of the forearm, and greatly surprised the attending surgeon when I told him that the ball was lodged between two of the flexors, near the elbow, at a place that appeared not in particular affected with inflammation.

The surgeon himself made the touch, but could detect nothing. I proved the accuracy of my diagnosis by cutting down on the ball and removing it.

Another case comes to mind in the same hospital, where the patient had a tumor occupying the space of the left scarpa triangle. I gave it a gentle grip with my left hand, and at once ascertained its steatomatous character. To extirpate it, which I persistently recommended, was by other surgeons present considered unadvisable. Dr. Grant, the surgeon having immediate charge of the patient, asked me if I was willing to perform the operation. I told him I was. He handed the patient over to me, but soon after privately told me that if I operated on him I would surely kill him. I performed the operation with a successful issue.

I have repeatedly extirpated the mammary gland for various stages of cancer, and almost invariably could I give a pretty reliable prognosis as to the result of the operation by the grip alone. In one instance of extensive cancerous mammary growth, the grip revealed that the intercostal muscles were not implicated with the disease. The patient had a happy recovery, to the great surprise of all who knew of her suffering and apparently hopeless condition.

In my practice in the City of New York, I removed a large uterine tumor. After the first incision, the tumor bulged out with great tension, and as its real nature was not fully and positively known, a very unpleasant crisis of the operation, for a moment, presented itself. An army surgeon of experience, with whom I performed many a surgical operation in the war, requested me to run a bistoury across the tumor, to lessen its size, taking it for granted it contained fluid. I slapped my hand over the tumor and its solidity was at once revealed. I then quickly enlarged the opening, and removed the growth with an ecraseur. Had I followed my friend's advice, she would have died under the knife.

When in the service, I received one night a hasty message to meet a surgeon that had a patient that was in a state of asphyxia from some unknown cause. Œdema of the epigottis was at once suspected; but by the "first touch" I found nothing the matter with that organ. I laid my hand over the chest, and felt by its rhythm that the cause of the asphyxia was not pulmonic. Therefore my diagnosis was that the seat of obstruction was in the larynx. I at once performed the operation of tracheotomy, resorted to artificial respiration, and in fifteen minutes the patient became con-



scious, raised himself up, and wildly asked what was the matter. By a subsequent investigation of the case we ascertained that he had been poisoned by opium. It was rather fortunate for the patient that we were ignorant of the cause of his troubles.

When in New York, a boy was sent to me that had a needle in his arm for some several weeks. One or two exploring incisions had been made to find it, but without success. I slowly glided the "second touch" over the arm where the needle was supposed to be, and I thought I detected a very limited ill-defined tumefaction. To make sure of my diagnosis I laid my index finger of the first touch over the spot. The muscles, more or less, responded to the pressure of the finger, and that sensitive organ failed to reveal the least isolated induration. But I softly held on to the spot with my finger, pressing very gently into the tissue synchronically with the pulsation of the patient. In about ten minutes the muscle ceased its rebellious action, and the spot was fairly determined. I now made an incision and removed the needle.

There is hardly a limit to which such a training may not be applied. Although I have isolated each method for special purposes, yet each must be practiced with the view of cultivating the sense, and at the same time reach the object in view.

Since writing the above I have read Dr. Lawson Tait's article on Methods of Diagnosis, published in the CINCINNATI MEDICAL NEWS of last April. He has evidently cultivated the sense of touch for diagnostic purposes with extraordinary results, as the following extracts will show :

"It is perfectly impossible for me to convey by any kind of description how I can tell by the touch an inflamed vaginal mucous surface from one that is healthy; neither can I describe the feeling that the everted surface of the cervix gives to me which declares the condition of chronic endometritis. But I know that my educated finger-tips can make this distinction. If on the other hand, I discover a pelvic tumor, long practice enables me to tell, with almost perfect certainty and without the use of the sound, that it is a retroverted fundus or adherent tube or ovary, or by its fading away toward the broad ligament, on one aspect of the uterus or another, that it is an intraperitoneal hæmatocele, while the peculiar resistance of a myoma conveys to my mind an accurate impression which needs no probing the uterus to sub-

stantiate. So a cyst reveals itself in a way I can not communicate."

\* \* \* \* \*

"Pregnancy, the rock ahead to inexperienced practitioners, can be infallibly revealed by palpation. First of all there is fluctuation, due to the liquor amnii, and it can be easily detected, and this declares the cystic nature of the mass. If the hand be made to lie gently on the parietes for a few minutes, a rhythmical contraction of the uterus, by which at one time it is hard as a cricket-ball, and at another soft as a cushion, will become perfectly apparent, and this is an infinitely more certain sign than the foetal head, or the sound of the placental *bruit*."

\* \* \* \* \*

"I have cured some three hundred cases of vesico-vaginal and recto-vaginal fistulæ, never having failed in any case, nor having ever refused one, and I habitually passed the sutures with my finger-tips wholly unaided by a speculum of any kind."

---

## Consanguinity in Marriage.

---

BY E. S. M'KEE, M. D., CINCINNATI.

---

Read before the Ohio State Medical Society at Akron, June 4, 1886.

1. Like breeds like, good or bad, entirely independent of consanguinity.
2. Evil results have undoubtedly followed consanguineous marriages, but whether dependent upon consanguinity is extremely doubtful.
3. Intemperance, luxury, dissipation, sloth and shiftlessness, as well as hygienic surroundings, and innumerable other causes, among them the depraved moral state dependent on births the result of incest, should bear much of the responsibility laid at the door of consanguinity.
4. Testimony is often weakened by religious or other prejudices.
5. Data are of doubtful reliability, full of flaws and false reasoning. The noted cases are the unfortunate ones. The favorable are unknown or forgotten. It is the ill news which travels fast and far.

6. We as physicians know that there is much more illicit intercourse than is generally discovered. May not many people be related, though not aware of it. Many marriages may thus occur between relatives presumed to be non-relatives, thus again vitiating statistics.

7. Statistics show about the same proportion of deaf mutes, idiots and insane persons descendent from consanguineous marriage to the whole number of these unfortunates as the number of consanguineous marriages is to the whole number of marriages. They show fertility among the consanguineous to be slightly greater than among non-consanguineous. They also show a somewhat greater frequency of retinitis pigmentosa.

8. Atavism explains fully the fact that in some instances healthy consanguineous parents beget unhealthy children. This, as is well known, occurs in most hereditary troubles. Furthermore, a less superficial examination may show this healthfulness to be only apparent.

9. Evil results, in the offspring of consanguineous marriages, proves that *something* was wrong. That it was the consanguinity has not been proven. It may have been one of a hundred things, and dependent on all of the antecedents for generations. Such results remaining absent after these marriages prove for that case, at least, that consanguinity was harmless, for it was known to be present. Further, if consanguinity was the cause, the effect should follow where the cause is present.

10. Consanguineous marriages, which bring together persons having a disease or morbid tendency in common, are dangerous to the offspring. Not, however, one whit more so than the marriage of any other two persons not related, yet having an equal amount of tendency to disease in common. Conditions present in both parents, good or bad, are simply augmented, and the result would have been the same were they not related.

11. Given a malformation or disease firmly established, we have a tendency to breed true. Given a defect or peculiarity in a family, race, or sect, this will naturally be propagated by intermarriage; *e. g.*, color blindness is remarkably hereditary among the Jews and Quakers. The Quakers are educated to abhor color. Those who admire color separate themselves from the sect, and thus intensify the tendency in the remainder. The defect has probably crept among

the Jews, and is kept up and intensified by inter-marriage. The same means has also had its effect among the Quakers.

12. Certain inherited diseases, as scrofula, phthisis and rachitis, which are ascribed to consanguineous marriages, probably in every instance could be traced back to an ancestor.

13. Man is an animal, anatomically, physiologically and sexually. He is subject to the same laws of propagation. In and in breeding in animals is carried on to an extent not only not permissible in the human species, on moral grounds, but also beyond the bounds of human possibility. Yet this is done by cunning breeders to improve the stock and put money into their pockets. The Jersey cattle have been bred for the last 150 years on a small island, 6 by 11 miles. You would not raise them for beef or oxen, yet they command a high price for their milk and butter. This was probably the recommendation of the first cattle on the island, and this quality has improved from that time to this through in and in breeding.

14. It would be better for the offspring were consanguineous marriages under medical supervision. Certainly no better than for all marriages to be under like supervision.

15. The half a hundred abnormalities ascribed to consanguinity, including almost all the ills that flesh is heir to, among others whooping-cough, approaches the ludicrous.

16. The factors which lead to consanguineous marriages are, portions of country geographically isolated, or mountainous, rendering communication with the outside world difficult, religious or political sects of an exclusive nature, and aristocratic ideas. As examples note the per cent. of consanguineous marriages in Scotland,  $5\frac{1}{4}$  per cent., to those in England, 3 per cent., the preponderance in Martha's Vineyard, the Commune of Batz, and among the Jews and Quakers.

17. The facts do not warrant us in supposing that there is a specific degenerative effect caused *ipso facto* by consanguinity.

18. Consanguineous marriages, no other objection being present, should not be opposed on physiological grounds.



## Translations from Our Foreign Exchanges.

Translated for MEDICAL NEWS, from the French, by Dr. Illovy,  
Cincinnati, Ohio.

### HEMORRHAGIC PLEURISIES—CLINICAL CONFERENCE OF PROF. DIEULAFOY AT THE HOSPITAL SAINT ANTONIE.

It is rarely that we are able to diagnosticate in advance the hemorrhagic nature of a pleural effusion; except under certain rare conditions, the appearance of blood at the time of the puncture is almost always a surprise. On this subject Dr. Dieulafoy remarked that hemorrhagic pleurises can be divided into four classes, in each of which the malady follows a different course. In the first group we find the hemorrhagic pleurises which come on as complications in cirrhosis, in Bright's disease, or in the infectious maladies.

In the second category can be placed all the hemorrhagic pleurises which are met with in tuberculous subjects, and which appear under diverse conditions; sometimes they accompany an acute tuberculosis; at other times they complicate the chronic form of this disease, and finally, they may be the first incident to reveal a tuberculosis, localized as yet in the pleura.

In the third group belong all cases of hemorrhagic pleurises allied to pleuro-pulmonary cancer.

Finally, the simple hemorrhagic pleurises, those which are due to what may be called simple hematoma of the pleura, form the fourth group. In this latter variety, a cure may result after a few punctures, which always give great relief. It can be readily conceived that there is often a great difficulty of diagnosis here, because it may happen in tuberculosis that matters should evolve in a manner analogous to that observed in simple hematoma.

Therapeutic intervention in cases of hemorrhagic pleurisy is reduced to one point, viz.: To evacuate the liquid, and this with certain precautions; evacuate a litre, for example, in such a manner as to bring the effusion to moderate proportions. Dr. Dieulafoy insists upon the necessity of rapid intervention at all times when the effusion is abundant, and cites a new example of the obligation the physician is under in such cases not to wait long. A patient had entered the service with a frankly acute pleurisy of the right side, and in whom the effusion augmented rapidly in abundance,

the liquid might be about two litres, and thoracentesis was proposed to the patient, who, however, refused to permit it, notwithstanding the representations that were made to him. An hour after, whilst in the act of descending from his bed, he was seized with a syncope and died suddenly. The autopsy permitted only the verification of the existence of an effusion of 2,200 grammes, and consisting of a citrene liquid of a very benignant nature, all the other organs being perfectly sound. This patient, although placed in the very best conditions, with a right pleurisy less dangerous to the heart than that of the left side, succumbed to a syncope which the thoracentesis refused by him, would certainly have prevented. It is therefore urgent in like cases to make the puncture, taking care, however, not to remove all the fluid at one time, so as avoid the thoracic pains, the cough, the pulmonary congestion, or the albuminous expectoration. This last precaution is more particularly necessary in cases of hemorrhagic pleurisy, and in these cases also the result of the puncture will enable us to prejudge to a certain extent the nature of the pleurisy. If the benefit derived from it is not very marked, if the dyspnœa be but slightly diminished, if the pains which come on permit of the evacuation of but a slight quantity of the liquid, we may rest assured that we have to deal with a case of hemorrhagic pleurisy, allied to cancer or tuberculosis. In simple hematoma, on the other hand, the relief is immediate, and after several punctures, at times after but one, a cure results.

There is, however, a practical point which it is of the greatest importance to know, namely: That all hemorrhagic pleurisies are curable, so far as the production of the hemorrhagic fluid is concerned; that is to say, even in tuberculosis, even in cancer, though more rarely, the liquid, which at the first punctures contained blood, may subsequently become perfectly clear. We must not therefore place too great confidence in this favorable transformation of the fluid, to affirm the benignant nature of the pleurisy.

As regards these multiple punctures, it is important to remark that many authors regard them as favoring the purulent transformation of the effusion; however, Dr. Dieulafoy has practiced puncture ninety-six times in these cases of hemorrhagic pleurisy, that is to say, in such cases where the transformation was most to be feared, and has never observed it. In this figure, the puncture repeated upon the patient figure a large part, and in one of these, attacked most

probably with a pleuro-pulmonary cancer, puncture was practiced thirty-five times at the time of this lecture. It has been repeated many times since then without the effusion becoming purulent. But in order to accomplish this, it is necessary to make use of instruments thoroughly clean, and we may rest assured that whenever this accident has happened and been ascribed as due to the puncture, it is because all the necessary vigorous precautions were not observed, and that the trocar inoculated the patient with some septic matters.

#### CLINICAL FORMS OF ANEURISM OF THE AORTA.

The clinical form of the aorta may realize a certain number of types which it is well to be acquainted with for the diagnosis of this lesion and its topography. It is thus that in a patient in the service, manifestly affected with aneurism of the aorta, the accidents appeared suddenly with suffocative attacks and dysphagia extremely violent. In him it was the type that may be called *recurrent*, in the sense that the tumor, by exciting the recurrent nerve, has caused a spasm of the glottis, the œsophagus and the pharynx. But even in this form there may result destruction of the recurrent, and in this case there ensues paralysis of the corresponding vocal chord. We can then observe the phenomenon known as the bitonal voice; this form may come on suddenly without any previous period of excitation, and the lesion manifests itself then all at once by this abnormal symptom.

Another morbid type is that where the affection interests *directly the cardiac plexus*. There are such cases, for example, in which the first accident is a violent attack of angina. One of the most curious observations in this respect is that of Trousseau, relative to a patient who for a number of years was considered by quite a number of physicians as afflicted with rheumatic neuralgia, and in whom at about the end of this period there was recognized the fremitus characteristic of the aneurism.

Again, in other cases it is the direct compression on the organs that plays the principal rôle, and for this it is not at all necessary that the aneurism should be voluminous. The œsophagus, the trachea, and the bronchi, may thus be compressed, and simultaneously also the great sympathetic; the vessels, especially the superior vena cava, may be so completely obstructed that there may result therefrom a con-

siderable disturbance of the circulation in the whole superior segment of the trunk. This is a special clinical type, although common in its cause and form.

It is altogether different with the last type, which may be called the *hemorrhagic*. It is constituted, not by the cases in which death results from the supervention of a sudden and abundant hemorrhage, but by those cases in which the hemorrhage, coming on from small fissures of the aorta, may be reproduced during two months, six months, or even a year, without the sanguineous loss giving rise to any serious accident. These hemorrhages may be of diverse forms. Dr. Dieulafoy had under observation a patient in whom the aneurism communicated with the pleura. In this patient a first thoracentesis gave issue to about a litre of bloody fluid. A second thoracentesis gave the same result. But about a month later the patient died of angina pectoris, and at the autopsy there was disclosed that the pleura was filled with blood, and that a clot was engaged in one of the fissures of the aortic aneurism.

Hemoptysis constitutes another form of these hemorrhages. Prof. Vulpian observed a case most curious by the number of these accidents; after a first very violent hemoptysis the patient recovered; a fresh hemorrhage came on a little later, then stopped, but from this time on a series of slight hemorrhages ended by bringing about the death of the patient.

The hemoptyses of a similar origin may appear for more than a year. These may be small hemorrhages, which are most frequently attributed to tuberculosis. Like these latter, they are intermittent, and nevertheless, if we have recognized the cause, we make the patient or his friends aware of the possibility of a sudden death.

Dr. Dieulafoy cites the case of a patient aged sixty-two years, who was afflicted with violent attacks of angina pectoris, which had been modified by diverse means. A little time thereafter he was seized with small hemoptyses analogous to those of pulmonary apoplexy. However, auscultation demonstrating no lesion of the lung, Dr. Dieulafoy pronounced the opinion that the hemorrhage occurred from a fissure of the aneurismal pouch, and that from then on a sudden death was to be feared. This, in fact, occurred a short time after, consequent upon a violent hemoptysis.

These are in résumé clinical types, by the side of which can be placed all the intermediary forms; but they can aid



us, once we are well acquainted with them, to avoid errors as well as to appreciate the gravity of cases. We must recollect, in fact, that the gravity of the prognosis of aortic aneurism does not depend so much upon its volume as upon the compression it exerts.—(*Journal de Med. and Chirurg.*)

#### THE SULPHATE OF SPARTEINE.

Since the experiments and investigations of Drs. Laborde and Hondé, much has been said of the sulphate of sparteine. Dr. Hondé has given a résumé of the principal facts relating to this agent in the *Repertoire de Pharmacie*.

Sparteine is a volatile base derived from the spartium scoparium (broom corn) of the family Legumina, which is habitually met with in most places. According to M. Lee, three characteristic effects are obtained with the sulphate of sparteine; the first, an increased tonicity of the heart and pulse; under this head it is equivalent to digitalis. The second is the immediate regulation of the disturbed cardiac rhythm; in this respect no remedy can be compared to it. The third effect is acceleration of the beats. All these phenomena manifest themselves at the end of an hour, or at most several hours, and are maintained for three or four days after the suppression of the medicine. During this time the general forces are augmented, the respiration is rendered easier; the urinary function alone, it seems, is not influenced by the doses, moderate it is true, employed by M. Lee. The remedy seems thus indicated whenever the heart has weakened, whether it be from an alteration in its tissue, or because it has become insufficient to compensate the obstacles of the circulation. When the pulse is irregular, intermittent or rhythmic, the sulphate of sparteine reestablishes the normal type. Finally, when the circulation is slowed, this medicament seems to rapidly obviate this functional trouble, still maintaining or augmenting the acquired force of the muscle.

The sulphate of sparteine is not administered in very fractional doses, not by milligrammes, but by centigrammes. The ordinary dose at once is two centigrammes, which may be repeated several times in the day, and may be pushed to 4, 6, 8, 10 centigrammes in twenty-four hours without any inconvenience resulting to the patient.

The following are advised by M. Hondé:

## 1st. Pills.

Sulphate of Sparteine,	. . .	0.50 centigrms.
Sacch. Lact.,	. . .	5 grammes.
Syr. Simpl,	. . .	9.5

M. S. a. and divide into 50 pills of 1 centigramme each.

Two to ten per day according to the directions of the physicians.

## 2d. Syrup.

Sulphate of Sparteine,	. . .	0.30 centigrms.
Aq. Destill,	. . .	2 grammes.
Syrup Aurantii Cort.,	. . .	300 grammes.

Agitate the mixture.—Twenty grammes of this syrup contain exactly two centigrammes of the active agent.—*(Journal de Medical and Chirurg.)*

---

### Discussion on Recurrent Iritis.

---

Read before the Philadelphia County Medical Society. Reported for the  
CINCINNATI MEDICAL NEWS.

---

DR. SHAKESPEARE, in opening the discussion, said: I agree with Dr. Risley as to the importance of a knowledge of the pathology of these troubles, but I am not entirely in accord with him when he suggests that recurrent iritis is most frequently the direct consequent of extension of inflammation from the choroid.

My own observation, and even some of the cases related by Dr. Risley, create in my mind the very strong impression that recurrent iritis, when not directly caused by irritation due to suddenly and constantly checked movements of the iris, where a partial synechia exists, is frequently brought about by constitutional conditions which affect the iris quite as directly as they do the choroid. I refer, for instance, to the agency of the syphilitic or rheumatismal poison in the production of inflammations, and express my belief that when recurrent iritis is not the direct result of the combined irritation of posterior synechia, and of a disturbance so slight or transient as in itself to be usually incapable of exciting deep inflammation, it is very often induced by the action upon the iris of a specific irritant, such as the virus, whatever that may be, of syphilis or rheumatism. I can see no valid reason for assuming that recurrent iritis and choroiditis,

when associated or single, and occurring in a rheumatic, gouty or syphilitic patient, are not each caused by the same constitutional irritant.

I by no means deny that there are cases of recurrent iritis, where the inflammation of the iris appears to be an extension of an acute, or of an exacerbation of a chronic inflammation of the deeper portions of the ureal tract.

But Dr. Risley seems to be of the opinion that such is the customary origin of recurrent iritis. It is on this point, then, that I differ from him. Moreover, the author, reasoning from his view of the usual course of recurrent iritis, arrives at the conclusion that adhesions of the pupillary margin of the iris and the adjoining capsule of the lens, so long as the whole pupillary border of the iris is not bound down, and the communication of the anterior and posterior chambers of the eye thus closed, are comparatively insignificant matters, and should ordinarily occasion little or no apprehension. Here again I must differ from him, and still more positively than before.

I regard it as all-important in the treatment of primary iritis to guard most carefully against the formation of posterior synechia. Furthermore, I consider it important, after the second attack has established the recurrent nature of the malady, and at a favorable moment, to carefully separate the synechiæ if they are not too extensive, or, in the latter case, to remove a portion of the iris by iridectomy.

Recurrent iritis after synechia is sure in time to bring about complete occlusion of the pupil, a condition which, unless remedied by operation, is certain to prove most disastrous. In order to remove the constant irritation of the iris, caused by one or more bonds of adhesion to the lens, and, still more important, to remove as far as possible the risk of subsequent complete occlusion of the pupil, I do not hesitate to advise the separation, at a proper moment, of slight adhesions, or the performance of an iridectomy if they are very extensive.

I am very well aware that occasionally (rarely indeed) the capsule of the crystalline lens, at the point of attachment, may be torn in the effort to detach the synechiæ and a traumatic cataract be established. But the danger is, I think, so small in comparison to the danger that the eye may be ultimately destroyed if the synechiæ be left to themselves, that it is, as a rule, safer to follow the practice of removing synechiæ when recurrent iritis is once confirmed. Of course,

the presence of a constitutional irritant greatly complicates this problem. In the cases, which I believe are comparatively rare, of recurrent iritis by extension of inflammation from the choroid or ciliary body, it is possible that the best procedure would be to leave posterior synechiæ alone so long as they are not complete, and do not occlude the pupil.

Dr. Little : Dr. Risley's paper is very important and suggestive, for the early recognition of iritis and its proper treatment prevent or mitigate the serious results that follow in the eyes thus affected.

The vascular tissues of the eye, composed of choroid, ciliary body and iris, are to be considered as one, and to say that inflammation is limited to only one part of it is difficult.

The treatment is largely mechanical; that is, the whole tissue when inflamed should be made free from muscular action; the iris dilated so no adhesions occur; the ciliary muscle and choroid likewise passive, so as not to damage the retina or vitreous; after subsidence of the inflammatory processes, if optical defects exist they should be corrected, so as to prevent recurrent attacks from irritation and congestion that exist in the tissue when optical defects exist, for the effect at seeing, produces trouble in these cases, and gives a foothold in a congested tissue for the constitutional taint, specific, rheumatic or otherwise; mere exposure will produce the same result. The constitutional treatment is more effective in eyes free from strain and normally vascularized.

As to the use of eserine in iritis, while a few years ago it was considered courageous to use it, in certain cases it acts well, care being taken to guard against adhesion by using atropia at stated times to prevent its adhesion; in cases where the adhesion already exists, it works well in relieving pain, but in the average case of iritis, atropia must be looked upon as the only treatment locally.

Dr. Risley's suggestion and good effect he had with eserine in a case of sympathetic iritis, while suggestive and contributory to advance in therapeutics of this disease, can not yet be looked upon as a preventive of sympathetic inflammation of the eye, no more than eresine can be claimed as a permanent method of cure for glaucoma by its use.

The presence of hyalitic in these severe cases of iritis, presenting a view of the fundus of the eye, can be helped



or cleared up to some extent by the use of electricity, so that changes in the retina or choroid can be recognized.

Opinions as to operative procedure differ in these severe types of iritis; it is better to wait till severe symptoms subside or disappear, and yet some cases do well by immediate operation; not enough such cases have been reported in comparison with those that have had no operation, for any judgment or statistics to be grounded; personal experience gives different opinions to observers.

Dr. L. Webster Fox: I rise to give the clinical history of a case of recurrent iritis, ending in sympathetic ophthalmia. Eighteen months ago I was asked, in consultation, to see a patient who had had several attacks of iritis in the right eye.

Mrs. E., aged thirty-three, married, well developed, with an irrelevant family history, always enjoyed good health and normal vision. The family physician three months previously was called to see the patient, who was suffering with pain in the eyeball, accompanied by supra- and infra-orbital pain, a marked ciliary zone of congested blood-vessels, a discolored iris which was sluggish and vision blurred. Atropia solution, gr. iv to  $\mathfrak{z}$ i, one drop every two hours, and internal medication of calomel was given. The disease responded rapidly to the treatment; the eye regained its normal color with full acuity of vision; three weeks subsequently a second attack came on, which was again promptly treated with good results. Nine weeks after the second attack, a third was ushered in with very severe pain over the brow, down the track of the infra-orbital nerve, congestion of the sclerotic vessels, with a deeper pink zone of ciliary blood-vessels, musty brown iris and hazy vitreous, with vision reduced to  $\frac{20}{200}$ , other than the hazy vitreous no lesion in the fundus could be seen. The following treatment was instituted: Atropia sulph., grs. iv to  $\mathfrak{z}$ i, one drop in eye every three hours, internally; hydrarg. chlor. mit., grs. ii, guarded by pulv. opii, gr.  $\frac{1}{2}$  twice daily, and four leeches to temple. The patient improved, and untoward symptoms passed off. The left eye was examined with the ophthalmoscope, and found normal, excepting slight degree of hypermetropic astigmatism. The eye (right) remained quiet for about two months, when another attack came on more virulent and aggravated in its symptoms. Upon instituting the atropia solution, it was found that posterior synechiæ had taken place, the pupil only responding to the

mydriatic in the upper and outer quadrant, possibly to one-sixth its diameter. The media, which had regained its transparency, was hazy (vitreous), obscuring the details of fundus. The vision had fallen to counting fingers at eight feet. In addition to the calomel and opium, a mixture of hydrarg. bichlor. gr.  $\frac{1}{48}$ , pot. iod. grs. xx, in water three times daily, was given; this treatment was continued till permanent salivation had taken place, which was in six to eight days; the hydrarg. was discontinued, but pot. iod. given as usual.

In two weeks the inflammatory condition commenced to pass off, but vision was reduced to qualitative perception only, after the inflammatory conditions of the eye had disappeared (four weeks after the beginning of the last attack); the patient was suddenly taken with great pains in back of head and at times nausea; these pains became so intolerable that the patient had to be kept under the influence of a hypnotic for several days at a time, this condition lasting off and on for four weeks, at the end of which time paresis of rectus externus of right eye manifested itself; there was convergent strabismus with diplopia, but no hemiopia could be elicited; the patient at this time answered questions intelligently; a careful examination of the right eye revealed no change either in the irregular shape of the pupil or in the haziness of the vitreous. In the left eye, however, a marked change had taken place; owing to the condition of the patient, it was impossible to make an ophthalmoscopic examination of this eye for four weeks. Well-marked keratitis possetates on Descemet's membrane, iris musty brown, vitreous slightly hazy (?), swelling of the optic nerve, arteries lessened in calibre, veins full, but not tortuous, their reflex gone, several small spots of choroiditis scattered about the equator of the eye, the eye representing a perfect picture of inflammation of the ureal tract. The urine was examined, no sugar nor albumen found. Medication was pushed till pronounced salivation and iodism made their appearance; notwithstanding this treatment, the eye (sympathizing) continued to grow worse until qualitative perception of light only remained (the paresis of the rectus muscle impressed). The vitreous became so filled with inflammatory products that it was impossible to make observations of the change that was going on in and about the optic nerve and choroid.

The last attack of iritis in the left eye was four months ago, when the eye suddenly became painful and exceedingly

sensitive to light, this attack lasting three days, the patient having been under constant medication (pot. iod.), leeches to the temple seemed to relieve the extraordinary condition at once. The patient is still under observation, and at last examination the vision in right eye (primarily affected) was found to be  $\frac{5}{200}$ , at one time qualitative perception only; in left eye (sympathizing eye) qualitative perception only. I may state that this is the first case of sympathetic ophthalmia due to recurrent iritis, that I have ever seen, although I had the opportunity of seeing many cases of recurrent iritis while clinical assistant and house surgeon at Moorfields Eye Hospital, London.

Operative interference was the method adopted at the above-named institution, to protect the patient from recurrent attacks. This was done by excising part of the iris, Mr. Streatfield at rare intervals performing this operation of separation of the synechiæ from the anterior capsule of the lens. The iridectomy was performed at such time when it was supposed that the iris was free from inflammation. An operation may be done with safety in from four to five months after the last attack of iritis.

Dr. Risley, closing the discussion, said: I quite agree with Dr. Shakespeare in his estimate of the importance of systemic conditions in this disease. Not only are syphilitic disease, the rheumatic or gouty diatheses frequent causes of idiopathic iritis, but doubtless exert a marked influence in sustaining the pathological conditions involving the entire choroidal tract, as a sequel of the acute iritis. But for these diatheses, many acute cases which are followed by chronic iritis, would have returned to a state of health. It was not my desire to underestimate the importance of the iritic attachment, but to point out that as a factor in the production of recurrent iritis, it had been overestimated.

If the views I have expressed are true, it renders less justifiable the operations for their detachment, *e. g.*, that devised by Streatfield, gently tearing them away by means of a blunt hook, which he inserted between the iris and lens capsule, or the Passavant operation, which consisted in grasping the iris at the point of attachment with forceps, and by traction detaching the adhesion. If the attachments are not so deleterious as was supposed, the risk following these operations is not to be justified.

I have no doubt but that an eye constantly in a state of retino-choroidal irritation, in low grades of inflammation, as

the result of strain in overcoming a hypermetropia or astigmatism, is more ready to take on all forms of disease, and may, therefore, as Dr. Little very fitly suggested, be more liable to iritis. Certainly, once attacked by iritis, such an eye would be more prone to disease of the choroidal tract and chronic or recurring iritis.

It was not my wish to present eserine as a panacea, or even as a usual remedy to be employed in the treatment of sympathetic disease, but reported the case in my paper as a clinical fact, the design being to set forth the value of this drug in improving the nutrition of chronically influenced eyeballs prone to set up sympathetic irritation, especially where there is increased tension of the offending ball.

I have had no experience in the use of electricity as an agent for hastening the absorption of vitreous facilities. Ophthalmologists, I am sure, would hail with pleasure any safe method which would accomplish a result so desirable. I should, however, use with great caution an agent, the powers of which are so imperfectly understood in any eye with an inflamed retina and choroid.

Dr. Fox has presented a very interesting history in his case of serous iritis, followed by sympathetic irritation. Such cases seem to shed light upon the vexed problem of the pathology of sympathetic irritation. One of the most interesting and important contributions, to our knowledge, of the subject, is that by Max. Knies (Vid. Archiv. Ophthal., vol. ix., page 125, N. Y.). In the case, the pathological histology of which he has so carefully presented, the disease had been apparently transmitted by the way of the optic nerves. The reported cases of sympathetic neuroretinitis are getting more numerous, and it would seem that ere long we shall have to relinquish the term *sympathetic*—certainly for very many cases of disease communicated to the fellow eye—for some name which shall indicate its true pathology.

Regarding the time after the iritic disease, when it is proper to perform iridectomy, I would remark that the symptoms in the individual case are probably the true guide for operative interference.

---

### Intestinal Obstruction.

---

*J. A. Thacker, M. D., Editor of MEDICAL NEWS:*

I HAVE read with interest your synopsis, in April number, of Dr. H. Illoway's treatment of intestinal obstruction,



quoted from *American Journal Medical Sciences*. I saw an epitome of the same in the *Journal of the American Medical Association*, January 9, 1886.

In January, 1885, I had a case of intestinal obstruction, in an old gentleman of seventy-three years, in which I used forcible injections of warm soapsuds with success. Pumped the bowel as full as possible. Used the injection the third time before relief was obtained.

Do not now remember where I obtained the idea, but do not claim it as original with me at that time.

Succeeded in an obstinate case of the same trouble last winter, by like means, in a man aged fifty-eight. In both cases the obstruction was in the region of the ilio-cecal valve.

SWANTON, O.

W. A. SCOTT, M. D.

---

## The Treatment of Diphtheria.

---

BY S. HENRY DESAU, M. D., NEW YORK.

---

Read before the North-western Medical and Surgical Society, March 17, 1886.

THE treatment of diphtheria has been selected as being the most practical portion of the subject for consideration, while at the same time much that can be said under this head will have reference besides to the etiology and pathology of the disease. Diphtheria is a disease that is so familiar to all, that the consideration of any method or means of combating it must prove, I take it, full of interest. While it is my object to call attention to some points in the treatment of diphtheria that have been of material assistance to me in managing this uncertain affection, I shall not pretend to offer anything that I can claim as strictly original.

Perhaps the first question that may engage our minds is, Shall diphtheria be treated as a local or constitutional affection? Ever since the announcement to the medical world, by Oertel and others, that the disease depended upon certain germs for its causation, medical opinion has been somewhat divided upon the question. Unfortunately, however, bacteriology has not as yet been able to satisfy us altogether upon the matter, from the fact, as stated by Loeffler, of Berlin, and other eminent authorities on the subject, that up to the present time the disease has not uniformly been successfully communicated to the lower animals. An immense ob-

stacle has thus been placed in the way of further progress toward the solution of the question.

It has now been definitely settled, I believe, that the causation of diphtheria depends upon two varieties of germs, a *bacillus* and a *coccus*, but which of the two is the more important factor is left undetermined, simply on account of their imperfect communicability to the lower animals. This fact also leaves us in the dark as to whether these germs act upon the tissues involved in diphtheria locally or through the vascular system, so that Oertel has concluded it is first a local disease, and secondarily affects the general system.

But may we not seek in another direction for light upon the subject? The clinical history of disease in many instances, to my mind, furnishes valuable points in directing our thoughts in regard to treatment, and this, together with comparisons derived from analogy in other diseases, is certainly of great advantage. If we refer to erysipelas, for instance, to illustrate my meaning, we will find many features of that disease that may be compared with diphtheria. Here we know that it is a constitutional, self-limited affection, with a local manifestation that is likewise produced by a specific germ. I refer, of course, to idiopathic erysipelas. Then why may we not draw a like inference in regard to diphtheria?

In the early period of my practice I was in the habit of using both local and constitutional treatment in diphtheria, but experience has satisfied me that, with the exception of where the disease involved the larynx or nasal cavities, constitutional treatment was all that was required. In fact, the natural tendency of the disease being to cause a lowering and depression of the vital forces, the efforts to employ local applications in young children were found all the more harmful on account of oftentimes the most obstinate resistance on the part of the child. The result was, more exhaustion on the part of the physical forces, and more disgust and resistance on the part of the little patient when the time came for making the next application. Certain it is, in my experience, that my cases have done far better since I abandoned local application.

I am fully aware of the argument that, after all, the remedies in most general use, such as the muriated tincture of iron, for instance, when used as a constitutional remedy, will also act topically on the mucous membranes of the pharynx, as it bathes them in the process of being swallowed.

I grant this point, even at the risk of weakening my position as to the nature of the poison; but if this local application will suffice, it is an immense advantage gained for the little patient in his chances to resist the affection.

It has been stated by Oertel, as before mentioned, that the virus of diphtheria, having a predilection for the mucous membranes of the tonsils and pharynx, and the cavities of the nose and larynx in a milder degree, is first localized there as a point of infection, and, after producing its peculiar effects upon those parts, in the form of exudation, is thence absorbed into the system. Scientifically this may be admitted as a tenable theory, but, as I have before remarked, it should, notwithstanding, have little weight with us in directing our treatment against the disease, as we do not yet know how soon this secondary affection occurs. I have seen high fever, severe pain, and other clinical symptoms occur in diphtheria, before the exudation was fully developed, and certainly I can not believe that these were due to the slight amount of local inflammation present. For a long while my practice in the treatment of diphtheria was to administer the familiar combination of muriated tincture of iron and chlorate of potassium in solution only. But the elevated temperature at the onset of the disease was such a marked symptom, to my mind, that it occurred to me that an antipyretic that would not weaken the heart, while it would reduce the amount of blood-pressure, especially in localized parts, would possibly be of great assistance to the action of the iron and chlorate of potassium. Following out this idea I soon adopted the practice of administering tincture of aconite, in doses of a drop, or a fraction thereof, according to the patient's age, giving it every fifteen minutes for the first hour, and thereafter hourly. This, I found, tended speedily to reduce the temperature, so that in from twenty-four to forty-eight hours there was little or no fever present. Since this method of reducing the temperature was adopted I have had no occasion to regret it. On the contrary, with one exception, where the disease, though only involving the tonsils and soft palate, assumed a malignant character on the second day of its course, and destroyed the patient on the fourth day, the success with my cases has been uniform. Independently of the effect to limit the duration of the disease, and consequently the extent of the exudation, I believe many advantages are gained to the patient, in the way of promotion of comfort, as well as the

relief of certain disagreeable features of the disease, as the vomiting, in the reduction of temperature. This is a point of great importance, in my estimation, in the management of diphtheria. The vomiting, for instance, in cases where the exudate has only involved the pharynx, not only adds to the exhaustion already existing, but makes the condition of affairs doubly worse by not permitting either food or medicine to be retained, where the frequent administration of both is all-important.

It may be thought that aconite would have a tendency to further weaken the heart, already made liable to this unfortunate feature by the diphtheric poison. The exact physiological action of aconite being still *sub judice*, this may or not be. But in the dose that I have given, as my practice in the administration of this drug, I have seen no such effects as a weakening of the heart's action. On the contrary, I have every reason to believe that it strengthens the already enfeebled heart-action, as is shown by a reduction of the temperature and pulse. And through its action upon the vaso-motor nerves it certainly reduces blood-pressure.

Since the introduction of antipyrin a more reliable remedy for reducing high temperatures has perhaps been found, and will no doubt afford immense satisfaction to those disposed to follow this method of treatment in diphtheria.

In seeking for an explanation of the beneficial action, according to my experience, of antipyretics in diphtheria with especial reference to those that do not too much weaken the heart's action, perhaps the best that can at present be offered is the fact, as demonstrated by Hamilton of Edinburgh ("Pract.," vol. xxiv., p. 87), that exudations, whether upon mucous or serous surfaces, or whether due to local mechanical obstruction in the capillaries, or certain changes in the condition of the blood, are the result of *suddenly increased blood-pressure*. The effect of antipyretics, like aconite and antipyrin, for example, when given in proper doses, is to lessen or modify this tension in the blood-vessels, either in a limited area or in the circulation at large, without at all weakening the heart's action. In diphtheria the blood, moreover, contains more albuminoids than normal, owing to the disorganizing influence upon it of the germ-poison, and the tension of the vascular system is increased suddenly, and perhaps maintained in this state for a prolonged period, through the irritant action of the altered condition of the blood, or the effect of the virus itself, as the



case may be. There may also be mechanical obstruction in the capillaries of the tissues of the pharynx, due, it may be allowed, as stated by Oertel, to the ingress of germs occluding their lumen. The exudate already formed may thus be limited in its tendency to spread, or its appearance in other parts, as the larynx for example, prevented, by controlling or keeping within safe limits this sudden rise of blood-pressure. I might mention here in this connection that Hamilton, above quoted, regards croupous and fibrous exudation as due to the same local pathological mechanism, viz.: suddenly increased blood-pressure, being manifestations of a difference in degree only, of the same. This is entirely independent of the view that the two manifestations may depend upon opposite and distinct *general* causes, and be recognized as distinct diseases. This view is corroborated by Wood and Formad, who, in their report on "Investigations of Diphtheria," say, that "any tracheitis of sufficient intensity," and it may be presumed from whatever cause, "is accompanied with exudation."

When I have the opportunity of seeing a case of diphtheria involving the pharynx or nasal cavities, in the onset of the attack, I am in the habit of administering a dose of calomel, say from three to five grains, according to the age of the patient, combined with from five to ten grains of bicarbonate of soda. This is given as the beginning of the treatment, for the purpose of clearing out the intestinal tract and inducing an increased action of the hepatic function. The importance of the latter will be mentioned further on. Besides tending to quiet the nervous system by relieving the intestines of any irritant substances that may be present, I believe the effect of the calomel and soda is often shown to aid in reducing temperature. The first dose, if effectual in emptying the bowels, is not repeated.

In common with the practice of most physicians at the present day, I use the tincture of the chloride of iron in combination with chlorate of potassium. The formula I prescribe is two drachms of the former to four ounces of a saturated solution of the latter, of which from one to two teaspoonfuls, according to age, are ordered to be given every hour. I do not regard this remedy as having any antiseptic virtue in the treatment of diphtheria, but as the tendency of the germ-poison is to cause a dissolution of the blood, I believe the iron in the form of tincture of the chloride aids in maintaining the normal condition of the

hæmatoïdin of the red blood-corpuscles, while the chlorate of potassium, in moderate doses, exerts a similar action, and at the same time, in conjunction with the tincture of iron, induces a diuretic action which may, to a certain extent, aid in eliminating the poison, or the results of its action on the blood, through the kidneys. Besides this, it is barely possible that the combination exerts a beneficial action upon the stomach by preventing abnormal fermentation of its contents, and thus enables that viscus to perform its functions in a physiological manner.

This last-mentioned action of the iron and potassium is, in my opinion, not to be slightly regarded, as we well know that the outcome of the action of the poison of diphtheria upon the blood is to cause depression and prostration of the vital forces, and whatever method can tend toward the maintenance of nutrition is of the highest importance.

Corrosive sublimate, in doses of one-fiftieth to a hundredth of a grain, repeated every hour, has been used by me in several well-marked cases of diphtheria with gratifying results. It was administered from the onset of the attack, where the pharynx and posterior pharynx were the seat of exudation, and, with the exception of aconite, was the only remedy used during the course of the disease. I am not inclined to regard the action of corrosive sublimate when used as an internal remedy as of an antiseptic character. Rutherford, in his investigations of so-called cholagogues, states that in small doses corrosive sublimate is a powerful hepatic stimulant in the dog, and supposes that it has a similar action upon man. Brunton, quoting Brieger, has lately shown that one of the important functions of the liver is its power to destroy ptomaines, or the alkaloid poisons produced in the ordinary process of digestion. Now, through the stimulant action of corrosive sublimate upon the liver, it is reasonable to infer that that organ may be made to assist largely in the elimination of the diphtheric virus through its destructive action upon the same. This was what was referred to when mention was made of the use of calomel and soda, though, perhaps, in this respect the latter is the more important of the two.

Benzoate of soda and salicylate of soda, both of which have been recommended in the treatment of diphtheria, and in various cases used by me, have, according to Rutherford, a marked cholagogue action, though in a less degree than

corrosive sublimate. Scarcely a less important matter than the consideration of drugs is attention to the general surroundings and diet in the treatment of diphtheria. I need hardly mention that good ventilation is of prime necessity. The temperature of the room should be kept at from 60° to 70° F., and the air rendered moist with a steaming kettle in the room. If possible a sunny exposure should be selected. Under every consideration the patient should be kept in bed until convalescence is fully established. The importance of this point will be recognized when we remember the extreme liability to collapse during the course of the disease, and to sudden attacks of syncope after all traces of exudation have disappeared.

As before mentioned, the natural tendency of the disease being to cause prostration of the nerve-forces, I order alcoholic stimulants, in the form of sherry wine, or old whisky or brandy, to be given at frequent intervals, from the beginning of the management of the case. These may be given in milk in the form of a punch. The proportions I generally order are a tablespoonful of the whisky or brandy, to a tumblerful of milk; and of this a tablespoonful to a half-wineglassful may be given every two hours.

Milk and beef extract should form the only articles of diet, the former being given in small and frequently repeated quantities, the latter not quite so often. In severe cases, where there is any disturbance of digestion, the milk is preferred in the pancreatized form; and the beef as sarcopепtones, according to the method of Leube. This insures their easy and speedy assimilation, and is worthy of important consideration.

In older children, where the pharynx is painful upon swallowing, I have found cracked ice held in the mouth near the pharynx, and allowed slowly to melt, prove very grateful. It is likely also to assist in reducing the local inflammation. Where the lymphatic glands of the neck become enlarged, applications of a weak tincture of iodine are used. So far I have made no mention of the use of local treatment, because I have ceased to use it except where the nasal cavities or the larynx are involved; and here it is not used for the purpose of destroying the poison in order to prevent its further infection of the general system, but merely in the first instances for purposes of cleanliness, to prevent, if possible, secondary septic absorption, as the nasal cavities furnish an unusual prone source in this respect. Where the larynx

is involved, of course, the idea is to get rid of the mechanical obstruction to respiration as soon as possible.

The application I prefer to use in the nasal cavities is a weak solution of biborate of soda, or common borax with boracic acid, to which a small quantity of glycerine is added. A more elegant combination, which also contains a small proportion of carbolic acid, is that known as Dobell's solution. This is usually applied in the form of a spray, from a Delano hand-atomizer, to the anterior nares, but an injection from a small nasal syringe may be in some cases preferable, and more effectively used according to the intelligence of the attendant. It should be used faithfully at least every two hours, and much oftener if the severity of the case requires it.

Where the larynx becomes involved, I have on one occasion met with most gratifying success in the use of the vapor of slacked lime constantly inhaled. The patient had erected over him a tent, from a blanket attached to the head-board of the bed and held up about its center with a barrel-hoop. A bucket of lime, which was slowly slacked from time to time by pouring water gently over it, was kept on a stool by the side of the bed, and below its level under the blanket. This was used for forty-eight hours, together with hourly spraying of the pharynx, under at times considerable opposition from the patient, with lime-water to which a few drops of liquor potassa was added; trypsin has recently been favorably recommended for a like purpose, but I have had no experience with it.

Tracheotomy, of course, should be held as a *dernier ressort*. I have never had occasion to perform it.

And now, in conclusion, it might be said by some, as it has been said by Henoch, "in my experience all remedies hitherto recommended, and I believe I have tried almost all, with the exception of sulphur preparations, are entirely useless in severe cases of the disease, and these alone should be considered, since the milder ones recover spontaneously." In answer to such, I would say that my own experience has been more fortunate, for while I do not deny having lost cases of diphtheria, yet I have had some that were almost despaired of recover. Moreover, I deny that it is in the power of any physician to say, in the early stage of a well-marked case of pharyngeal diphtheria, that it is a mild one and will recover spontaneously. I do not think that we are called upon to treat any disease more insidious in its prog-



ress than diphtheria, and cases that may appear to be mild when first seen, are liable to end in the death of the patient. I well remember my own experience in such cases, having been previously recommended by a friend who stands eminent in the medical profession to abstain from all active interference in a mild case of the disease, as I would be able to convince myself of its spontaneous recovery, and hence the uselessness of treatment. In the next case of the kind I saw where the exudation was limited to the tonsils and the febrile movement not very strong, I followed the advice, and, much to my regret, the case went from bad to worse—the nasal cavities and post-pharynx became involved, and death followed from exhaustion. I regard every case of diphtheria I meet with, where the constitutional symptoms are marked, as of a serious character, or likely to become so, and treat it accordingly. As we well know, it is those cases which are so mild as to cause little or no anxiety that are so frequently attended with involvement of the larynx, and this danger should always be kept in view.

Neither do I entirely reject the view as expressed by Sir John Rose Cormack, in his article on diphtheria, in Quain's "Dictionary of Medicine," that it is a disease that runs its own course and can not be limited. But as in the treatment of other self-limited diseases, as typhoid fever for example, certain indications may be met that will sustain the vital forces and modify the intensity of the poison, so that *the tendency to death may be averted*. If I have succeeded in drawing your attention to any points in this short paper that may aid in accomplishing these two results, I shall feel that my labor has not been in vain.

47 West Fifty-sixth Street.

LOCAL REMEDY FOR NEURALGIA.—A mixture of one part of iodoform to ten or fifteen of collodion, if spread repeatedly upon a neuralgic surface until it attains a thickness of one to two millimetres, is said to be quite effective in the treatment of certain neuralgias. If the first application does not speedily terminate the neuralgia, those who have used this mode of treatment direct that its application should be continued. It seems especially valuable in the relief of neuralgias of the trigeminus. It also seems of value to be applied along the spine, particularly at painful points in what is called spinal irritation. These observations are by no means new, and yet they seem worthy of further consideration. — *Neurological Review*.

## Selections.

---

### On the Early Diagnosis and Treatment of Syphilis.

---

BY FESSENDEN N. OTIS, M. D., NEW YORK.

---

Clinical Professor of Genito-Urinary Diseases of the College of Physicians and Surgeons.

SYPHILIS is not necessarily of venereal origin. From the intimate contact which occurs in the sexual relations and from the fact that abrasions are most common on mucous membranes, it is usually communicated through sexual contact, but syphilis may be and is frequently conveyed through what is termed *mediate contagion*—that is, by means of any substance, fluid or solid, in or upon which has been deposited the contagium or disease germ of syphilis. Thus the blood of a person may be the medium of the contagion after the second month of its acquirement or inoculation. Pencils, cups, spoons or pipes, or dentists' instruments, defiled by the saliva of a person who has syphilitic lesions on the lips or in the mouth or throat, may be the medium of communicating syphilis to an innocent person, provided only that such articles are brought into contact with an abrasion or cut on such person. Fortunately this open-lesion on the healthy is essential to the acquirement of syphilis.

The site of inoculation of syphilis is called the *initial lesion* or *chancre*. This does not necessarily present any characteristic features when first observed. It may be, to all appearance, a simple abrasion, a crack, a wart, a vesicle, a pustule, or a papula, and yet prove to be just as much an initial lesion of syphilis as if it presented the characteristic induration and saucer-shaped excavation of the typical Hunterian chancre.

It is true that induration of a sore is always suggestive of syphilis, and that there are indurations associated with venereal lesions which enable one to claim, at once, with positiveness, a syphilitic cause, and these are such as are of a cartilaginous hardness; but in the majority of cases the induration is not a sure guide, because often not present in sufficient degree to be characteristic, and frequently not present at all. Sores, however, which indurate even slightly *after healing* are, as a rule, syphilitic.

Diagnosis of syphilis, as a rule, is impossible before the third week from the date of exposure. Abrasions or indurations which are first discovered two or four or even eight weeks after a suspicious connection, if not otherwise distinctly accounted for, are usually initial lesions of syphilis.

And often no positive diagnosis can be made before as many months or more. This fact makes it necessary to give a guarded prognosis in regard to any and all lesions about the genito-urinary apparatus, whether abrasions, apparently simple, or accidental scratches, or even points of redness, in every case when an illicit sexual contact has taken place, and to keep the individual under observation for at least seventy-five days, and no suspicious lesions appearing, before a positive assurance should be given that the danger of subsequent development of syphilis is past. Even if nothing abnormal is discovered after an illicit connection, marriage should not be entered into nor marital relations resumed until at least that period has passed, and the result of a careful re-examination has given assurance of probable escape from syphilitic infection. Fournier cites a case where the apparent incubation was seventy-five days, Bumstead and Taylor, one of fifty days. The average is stated to be about twenty-four days.

Initial lesions of syphilis on the integument do not exhibit a characteristic induration, as for instance on the finger or on the body of the penis.

In every case when the possibility of having acquired syphilis is under consideration, an examination of the person with whom contact has occurred should be insisted on when practicable, and in such examination not only the genital apparatus, but the mouth, throat and anus should receive careful scrutiny. Examine not only the body for eruptions, especially the scalp—not only the lymphatic glands in the groins, but in the neck and in the epitrochlear spaces. In all cases it should be borne in mind that *recent, painless* gland enlargements are almost certainly due to a syphilitic infection.

In such examinations it must be remembered that the late or so-called *tertiary* lesions of syphilis are *not inoculable*, and that the presence of such lesions, whether as eruptions or ulcerations, do not indicate a capacity to communicate syphilis. On the contrary, if well authenticated as tertiary lesions or sequelæ, they go to prove that the person bearing

such manifestations has not been the source of a fresh infection.

In the examination of a person having had connection or contact with a person suspected of having syphilis, note not alone the date of such exposure as claimed, but also the date of preceding exposures, whether believed to be suspicious or otherwise, bearing in mind the fact that no feature characteristic of a syphilitic infection is likely to be present under fifteen or twenty days from the date of such contact. Observe not only the condition of lymphatic glands adjacent to any suspected lesion, but also those of the neck and epitrochlear spaces, and any enlargement should be marked and noted for future reference.

In the absence of positive evidence of syphilis in any lesion following illicit contact, *no internal treatment is necessary*. Local measures based upon local conditions alone are advisable. If an abrasion is present, or an inflamed point or patch, or an herpetic visicle, or a scratch, the application of a weak solution (2 grs. to oz.) of the acetate of lead, or of ferric alum in rose-water, or a little powdered oxide of zinc, is sufficient. If the lesion is pustular, it should be cauterized and treated as a chancroid until healing has taken place, or until satisfactory evidences of syphilitic infection are present. Every lesion, of whatever size and description, following a suspicious venereal contact should be subjected to frequent observation, and its progress minutely noted with reference to its possible syphilitic nature. If it heals without induration and without marked enlargement of adjacent lymphatic glands, and if for a period of twenty-five days no induration develops on the site of the lesion, and no enlargement of glands has, after close observation, been discovered, then the escape from infection may be fairly assumed; but it is not absolutely safe to give a positive opinion that the lesion has been non-syphilitic until the full period of seventy-five days (previously noted as the extreme known limit of incubation) has been reached, without the occurrence of local pathological changes. On the other hand, if the lesion is a papule from its first discovery, or an erosion situated on a papule—insensitive, sluggish, persistent—or if, after healing, it is easily abraded, or, if open, its secretion is serous and scanty, and its base more or less indurated, or if, when on the integument it becomes boggy and red, or stiffened and scaling, and if in addition the lymphatic glands in connection with it become enlarged, there is here no



reasonable doubt but that the disease is an initial lesion of syphilis, and it should be treated accordingly. It is the coincidence of a number of evidences of the syphilitic nature of the local lesion upon which an early decision is based, and not upon any one, although the occurrence of any one of the above-named evidences should compel a postponement of a *positive* decision until the full period during which secondary symptoms might develop has passed; and this is not less than six months. A well-grounded *suspicion* of the syphilitic origin of any lesion should be a bar to marriage for at least three years, or to the resumption of marital relations for a period of at least six months.

This apparently excessive caution becomes essential from the fact that if by any means the suspected lesion subsequently proves to be syphilitic, the blood in such case, through an accidental scratch or abrasion coming in contact with a similar breach of surface on a healthy person, may be the means of communicating syphilis. The failure to appreciate such danger as the foregoing has resulted (in recorded and well-authenticated cases) in the communication of syphilis to innocent wives by husbands who, after careful examination by their medical advisers, had received permission to resume marital relations.—*N. Y. Medical Monthly*.

---

### Cerebral Embolism.

---

BY DR. J. M. DA COSTA, OF PHILADELPHIA.

---

THIS case possesses very great interest. We have a man who came into the hospital on the 13th of January. He is a sailor; always well until this attack, and has no history of syphilis. Four days before his admission, as he arose from his bunk, he suddenly lost all power in his right leg and arm, and fell to the ground; he did not lose consciousness, and after being paralyzed for several hours he recovered the ability to walk, and after some little time the use of the arm was regained; but the limb remained weak. He, however, continued to improve, save for the weakness and shooting pains in the abdomen, until the morning of his admission, when he had a second attack, in all respects a counterpart of the first. Upon admission he was stupid

and drowsy, (which he claims to be his natural state,) the tongue was coated; bowels costive; pupils normal; pulse feeble and temperature and respiration normal. There was complete paralysis of the right leg, as also of the deltoid, triceps and extensors of the right arm; the grasp of the right hand was feeble, but there was no implication of the facial muscles. He could move his arm slightly in the bed, but could not walk. Cutaneous sensibility and reflex were normal. Patellar reflex on the right side was increased, though when we examine for it, to-day, we find it diminished. He lies most of the time stupid and drowsy; there is no headache, and the urine contains neither albumen nor sugar. The electro-muscular excitability is preserving. The pupils may possibly be a shade smaller than usual, but not enough so for us to attach any importance to it. The heart sounds are feeble, more particularly the first sound, but there is no increase of dullness on percussion in the cardiac region. We have no clear history of alcoholism, though the man says that some years ago he was a heavy drinker. The liver dullness extends slightly below the margin of the ribs, and the splenic dullness reaches just to the margin. The abdomen is somewhat distended, and it has been necessary to resort to croton oil to keep the bowels open. During the time that he has been in the hospital he has gained power in the right arm, but the grasp of the right hand is still markedly feebler than that of the left. He can now, with much difficulty, flex the right leg as he lies in bed, and you see that the effort produces a peculiar contraction of the muscles about the knee joint. Sensation is good in the leg, but he does not respond to tickling of the sole of the foot; this same thing, however, is observed in the left foot, and is probably due to the fact that the skin on the soles is very thick. He sleeps well.

Now, having the clinical history before us, we see that this is rather an unusual case. The man has had two attacks of paralysis, four days apart, in which the paralysis was limited to certain parts, and in which there was no loss of consciousness. The first yielded rapidly, as also did the second, though somewhat less rapidly. There is no renal disease, and there is a feeble first heart sound; the paralysis is purely motor. In a general way we would say that such an attack was apoplexy, but we must not rest satisfied with such a general assertion; we must ask ourselves whether these symptoms are really produced by an extravasation of

- blood, by an intense cerebral congestion or by embolism. It is by no means a case easy to solve off-hand; it requires considerable deliberation. As a rule, when we have sudden paralysis, without loss of consciousness, which disappears or lessens quite rapidly, we would be more inclined to attribute it to a plugging of the cerebral vessel, than to a rupture and the formation of a clot; but the difficulties in the way of this assumption are great, because the most frequent cause of embolism, that is to say, disease of the heart, is not here present.

The view that it is due to a rupture and the formation of a clot has in its favor the suddenness of the attack, occurring without any apparent exciting cause, and also the fact that such is the more frequent cause of such cases, being the cause in a little over nine out of every ten cases; but against this view (and holding it we could only assume a small clot, on account of the rapidity of recuperation) is the fact that a second attack occurred in four days, and that even in this latter seizure consciousness was not abolished. Granting that the first attack might have been caused by a small clot, it would require a great stretch of the imagination to assume that a second identically similar traumatism should occur in four days. The diagnosis then rests between these conditions. Plugging of a vessel would account for them, because multiple pluggings are not uncommon. Between the views of double apoplexy and embolism, I think the evidence is in favor of the latter. Remember that when he was brought into the hospital, he had a feeble pulse, which is not at all like the pulse of apoplexy. I conclude that owing to the feebleness of the circulation a plug has been formed (not washed, for there is no disease of the valves) in some vessel going to a motor ganglion, as the corpus striatum, it may be in some small branch of the middle cerebral artery. This plug probably being washed further on was the cause of the second attack.

For treatment, we will keep the man warm and quiet, purge him by croton oil, and by the use of absorbents, such as iodide of potassium, endeavor to work a change in the organic condition which we believe to be present. In addition to these means, I think that this is a good case for the use of digitalis, on account of the weak condition of the heart. We will, therefore, order him ten drops of the tincture thrice daily, to tone up the heart.—*American Lancet.*

## Chatham Medical Society.

---

### TWO CASES OF VESICO-VAGINAL FISTULA.

Dr. Murphy read the history of the two following cases :

Case 1.—M. B., aged 19, unmarried. Began to menstruate between her sixteenth and seventeenth years. Her mother being dead, and having no one to advise her, she sought to arrest the menstrual flow by introducing into the vagina a wooden spool. After this event she suffered severe abdominal pain during menstruation, for which she received medical treatment from time to time, anodynes being administered which gave temporary relief. The real cause of the pain and distress was unsuspected and the case supposed to be one of dysmenorrhœa. The patient continued in this condition for nearly two years, or until a new difficulty arose in consequence of the urine constantly trickling away from the vagina. A digital examination was now instituted, which revealed the fact that the anterior wall of the vagina, especially its whole after-part, was encroached upon by what appeared to be a large solid globular-shaped body projecting through the base of the bladder into the vagina; a foetid smell was also apparent. It was not until this juncture that the patient confessed to having introduced the foreign body as above stated. This information was opportune. The parts being extremely irritable, the patient was enjoined to keep her bed for a few days and soothing injections used. An occasional anodyne suppository, the use of a simple diet, demulcents, and the division of several cicatricial bands constituted the treatment prior to the operation for removing the foreign body. This was accomplished by placing the patient in the usual position, exposing the fistula to view by a Sim's speculum, then introducing a Thompson's lithotrite up through the fistulous opening and crushing the phosphatic concretion which surrounded the foreign body on all sides to the extent of an inch or more. The substance removed, minus the spool, more than filled an ordinary ounce quinine bottle, and the fistulous orifice which was left to be subsequently dealt with was fully an inch and three-quarters in its long axis. Some six weeks was allowed to elapse before the operation for the closure of the fistula was undertaken; the interval being employed in treating the existing vaginitis and cystitis, and improving the general health of the patient. The operation was per-



formed in the usual manner, and was a perfect success. The breach of continuity was so great that it required eleven silver sutures to properly close it.

Case 2.—Mrs. S. The cause of the fistula in this case was a prolonged labor of several days' duration after the foetal head had descended into the pelvis. The operation was performed similarly as in Case 1, and was an entire success.

EXTRACTION OF THE AFTER-COMING HEAD, WITH HISTORY OF  
A CASE.

Dr. McKeough reported a case of midwifery with special reference to the delivery of the after-coming head. Mrs. B., aged 42, was married when quite young, both labors being normal and not difficult. Shortly after the birth of her second child she became a widow, and remained so until she was thirty-eight years old, when she again married. A year subsequently she gave birth to a child, which was delivered instrumentally by Dr. Holmes, great difficulty being experienced in bringing the head through the brim of the pelvis. Dr. Holmes thought the cause of the obstruction was either a small exostosis or enchondroma growing from the promontory of the sacrum. Two years later she was taken in labor for the fourth time. When Dr. McKeough was called she had been in labor about eighteen or twenty hours. The vagina was hot and dry, the amniotic fluid having escaped several hours previously. Pulse quick and rapid. The os was fully dilated, but the head had not entered the brim, which seemed narrowed in its antro-posterior diameter. The forceps were at once applied, but all attempts at extraction were futile. Assistance was obtained. Ether was administered and the child turned; the body of the child was delivered with some difficulty, but the head could not be extracted by the ordinary methods of expression and traction. The woman's condition being critical, it was resolved to perforate at once, which, being accomplished, delivery was soon completed. Apart from the cause of the obstruction, which was apparently progressive in its nature, the interest of the case lay in the extraction of the after-coming head. Referring to the literature of the subject, some diversity of opinion exists. In ordinary cases delivery can be accomplished by manipulation, which undoubtedly is the preferable mode. When this can not be accomplished, the question arises whether perforation or the forceps are indicated. Koppe and Schroeder regard it

as a useless procedure to apply the forceps to an after-coming head, and maintain that perforation is the best and safest measure to adopt, whilst Credé (quoted in *American Lancet*, 1886) and Lomer (quoted in *Amer. Jour. Med. Sci.*, April, 1886) assert that in certain cases the application of forceps is a useful and successful procedure, and may be the means of saving the life of the child, both authorities reporting cases to that effect. Koppe describes a manual method which may be of service in some cases, viz.: Empty the bladder, bring the antero-posterior diameter of the head into the transverse diameter of the pelvis. Place the hand just above the symphysis and firmly press the head of the child against the last lumbar vertebra. The bones of the head glide over one another, diminishing the biparietal diameter. As soon as the head is felt to glide into the pelvis, traction is used and delivery is completed (*Amer. Jour. Med. Sci.*, April, 1886).

#### AMPUTATION OF THE THIGH.

The President read the history of a case of amputation of the thigh. When called to the patient he found an oblique fracture of the femur about two inches above the knee, the result of an accident which had occurred nineteen days previous. There was no union, and the leg as far as the knee was gangrenous, the gangrene having commenced at the knee and progressed downward. The man was also suffering from blood-poisoning. Temperature,  $104\frac{3}{4}^{\circ}$ ; pulse, 140, and general condition very grave. He advised amputation, but endeavored first to improve his general state. Tr. ferri. mur., 30 minims, and quiniæ sulph, grs. 3, every three hours, were ordered, together with beef tea, oysters, milk and brandy. Two days later the condition of the man had so much improved that he resolved to operate at once. His temperature at the time of the amputation was  $106\frac{1}{2}^{\circ}$ , and his pulse 90. The circular operation was performed, the leg being removed about the middle of the thigh, four inches above the fracture, and at that distance the muscles, as well as the integument, showed signs of bruising. Gangrene attacked the flaps the day after the operation, and they sloughed away to the extent of three inches or more, probably owing to the bruised condition of the parts. Granulations, however, were rapidly covering the exposed bone, and the general condition of the man at present, four weeks after the operation, was most favorable, and there was every prospect of a good stump.

## MULTIPLE NEURITIS.

Dr. Holmes read the history of the following case: Miss E. W., aged 36. Has a good family history. Always well until four and a half years ago, when inability to recognize sensations of heat and cold affected the outer side of the left foot and rapidly extended to the entire limb, which was also affected with slight intermittent muscular twitchings. These symptoms have undergone but little change since. Three years ago she had an attack of inflammatory rheumatism, from which she had a slow convalescence, but gradually regained her former health, until about two years ago, when she was seized with great sacral pain, which continued for several months, but finally disappeared. A year ago the right arm and shoulder lost the power of distinguishing between heat and cold, but gave little inconvenience for three months, when distressing burning and stinging sensations were felt in the arm, shoulder and adjacent thoracic region. There was but little change in these symptoms when she consulted Dr. Holmes. The arm is easily fatigued and quite useless. The hand is glossy and puffy and shows spots of slight purplish discoloration. Feels pricking and pinching equally well in each arm and hand. Her general health is good, uterine functions normal. She is not nervous nor hysterical and looks well. She had had electricity, both Faradic and constant currents, applied for a length of time and taken the iodides in large doses for a long period, with much benefit to her general health, but without much improvement to the local symptoms.

Thinking this to be a case of multiple neuritis in which the lesions continued after the original cause had been removed, and that the existing state was one of chronic passive congestion of interstitial nerve elements with probably pressure from inflammatory effusion, Dr. Holmes resolved to try the Paquelin's thermo-cautery. This was applied pretty extensively to the hand, arm, shoulder and thoracic region, and also along the right side of the spine in the interscapular region to the extent of producing slight vesication. In all there were sixteen applications during the course of two months' treatment. There was constant gradual improvement from the commencement of the treatment, and at its cessation she could use her arm in household duties quite well, and the burning and stinging had about disappeared. —*American Lancet.*

## Creosote a Specific for Erysipelas.

---

TIME was when the advocate of a specific was laughed at by the scientific world, but since it is known that so many forms of disease are the direct result of some kind of germ life, it is no longer a misnomer to call a medicine which will certainly, and always, destroy the germ which produces so many forms of disease, a specific.

In the light of this definition, founded upon the experience of forty years' successful practice in treating this form of disease with creosote, the writer is prepared to indorse the heading of this article. Having used all the different remedies ordinarily prescribed, they have long since been laid aside, and this one used in all forms of the disease, exclusively, and with uniform success.

In 1863 it was the writer's fortune to spend several weeks in a military hospital in Memphis, as a volunteer surgeon, under the direction of Dr. Lord. In conversation with him the use of this article was mentioned, which appeared new to him, and a case was put under treatment with it, with such prompt, favorable results, as to elicit his hearty commendation, and at his suggestion, Surgeon-General Hammond was informed of it.

All injuries, of whatever kind, have been treated with dressings of this remedy, and where this has been done from the first to last, in no instance has there been an attack of erysipelas.

The usual manner of application was in solution of six to twenty drops to the ounce of water, keeping the parts covered with cloths constantly wet with it. In ulcers or wounds it may be used in the form of a poultice, by stirring ground elm into the solution; the strength to be regulated according to the virulence of the attack. Ordinarily, ten drops to the ounce is strong enough for the cutaneous form of the disease, and in dressings for wounds or recent injuries. If the inflammation threatens to spread rapidly, it should be increased to twenty or more drops to the ounce of water.

The antiseptic properties of this remedy render it of additional value, as it will certainly destroy the tendency to unhealthy suppuratation, and thus prevent septicemia.

In the treatment of hundreds of cases of erysipelas, but a fatal case had occurred, and that one in an old and depraved system. In the less violent attacks, no other remedy was



used, but where constitutional treatment was indicated, the usual appropriate tonics were prescribed.

There is no question in my mind, but that creosote is as much a specific in erysipelas, as quinine is in intermittent, and may be used with as much confidence.—*St. Louis Medical Journal*.

---

### Value of Pasteur's Researches.

---

WITH reference to the value of Pasteur's researches, it is evident that he is manfully and scientifically working out a problem which he confesses is as yet unsolved, although every day approaching nearer a solution. Many able observers declare themselves satisfied with the evidence already adduced. Vulpian declared to the Academy that "Pasteur had created a method of treatment by means of which one may with absolute certainty prevent the development of rabies in a man who had been bitten by a mad dog. I say 'with absolute certainty,' because, after what I have observed in M. Pasteur's laboratory, I can not doubt." That by Pasteur's method of inoculation dogs are rendered insusceptible to the effects of inoculation with rabic virus, we believe, is now accepted generally as a demonstrated fact. Nearly a thousand human beings supposed to have been bitten by mad dogs have now been treated by essentially the same method. Of the greater part of these it can only be said than the inoculations have been made too recently to determine whether they will escape entirely or not, on account of the varying length of the period of incubation in hydrophobia; but it is stated that out of nine hundred and sixty-five inoculations, there has been (excluding the Russian bitten by wolves) but one fatal case. Is this a coincidence? "Six hundred and eighty-two thousand five hundred francs have already been contributed toward the establishment of an institution for the inoculation of persons bitten by rabid animals. Is all the world gone mad, that money is lavished upon a chimera? It is as unscientific to deny upon sufficient evidence as it is to assert without proof. 'Tell American skeptics to wait,' says Pasteur. 'Doubt is wise and healthful: but doubters must not expect all their doubts answered at once. Recall Jenner. Could he have satisfied his opponents while he stood on the threshold of his experience? Let your last

word to them be *wait!* and if they continue to doubt, let them come to me and judge for themselves.'"—*Philadelphia Medical Times*.

## Carcinoma Ventriculi and Operative Treatment.

THE great interest that cases of cancer of the stomach have maintained, from a surgical point of view, have given rise to statistical study of the subject, the large material of the European hospitals affording an especially good basis for comparison and generalization. Hahn gives us the statistics of the obductions held at the Krakenhaus Friederichshain, Berlin. During the past five years, 7,205 died at the institution, 166 of the decedents having had cancer of the stomach, a percentage of 2.3.

The analysis of these 166 cases shows the occurrence to have been in 98 male and in 68 female patients. Half of the number were sixty years of age, and over; only two died at less than thirty. In respect to the site it is reported that sixty cases involved the pylorus, forty the cardia, twenty-seven the smaller curvature, and twenty-one the whole stomach. In the remaining eighteen cases the localization was at the large curvature in eight instances, at the anterior wall in seven, and at the posterior wall in three cases. In one-half of the pyloric cancers metastatic tumors had arisen in the lymphatic glands of the epigastrium and the porta hepatis. The cancers situated at other points than the pylorus show a still greater percentage of early and extended metastasis.

Of the cancers, twenty-seven were of the scirrhus variety, seventy-five were ulcerated forms, and seven belonged to the gelatinous or colloid description. The latter appear to have an especial disposition to metastasis on the peritoneum.

Hahn proceeds, thereupon, to analyze and group the cases reported with reference to operative interference, and arrives at the conclusion that only a limited number is suited for such treatment. The cancers of the pylorus offer the best opportunities for operation, and, even of their number, only a few were positively recognized as malignant growths at a time when no dissemination had yet occurred. The recognition of the tumor at the pyloric region of the stomach is not difficult, if the portion remains free from adhesions, so that the tumor drags down the stomach. Distention

of the stomach by carbonic acid gas may give good help in mapping out the tumor and determining its connection with the stomach. Great difficulty is encountered in making out the tumor in cases where the pylorus is fixed at its normal site by adhesions, and remains covered by the liver. Even narcosis is then often insufficient to render palpitation unmistakable. The exploratory incision is, then, the only safe means and a justifiable method of arriving at definite certainty.

A review of the cases of recovery after resection of the pylorus shows that, in nearly all of them, no adhesions existed, and only slight and neighboring lymph-gland infiltration had taken place. In view of this fact, and of the many fatal results and recurrences after the more difficult, complicated operations, Hahn urges a most careful selection of cases for operation. The great majority of the cases are unfit for the resection, and relief can be more safely given by gastro-enterostomy.

The author of the report gives the particulars of four resections of the pylorus executed by him; also of two gastro-enterostomies. Two of the resections died of peritonitis in a few days. The other two terminated fatally after 2-3 months of recurrence of the neoplasm. One of the gastro-enterostomies died in consequence of a perforation of the gut; the other is doing well, several months after the operation. The plan of operation followed by Hahn is that of Woelffler, *i. e.*, insertion of a loop of intestine, situated about 40-50 Cm. beyond the plica duodeno-jejunalis into the anterior wall of the stomach, after drawing it upward and over the omentum and the transverse colon.—*Weekly Medical Review*.

---

### The Justifiability of Craniotomy.

---

THE subject above alluded to has been fully and ably ventilated by arguments *pro* and *contra* in recent numbers of the REVIEW. In connection therewith, it is interesting to hear what Lawson Tait has to say, respecting the issue. He writes to the *London Medical Press* as follows:

Speaking from the mere manipulative experience of the operation, and basing my judgment, of course, also largely upon my other experiences in abdominal surgery, I have no hesitation whatever in saying that if I had a hundred Porro

operations to do, before craniotomy or any other of the tentative proceedings upon the child had been attempted, I would not have a mortality of more than four or five per cent. The proceeding is so easy, the complications which are possible so few, and the simplicity of the operation so much greater than that of hysterectomy, that I am sure that this conclusion is not at all overdrawn. As I am not an obstetrician, I can not, of course, argue the question upon the ground of the practice of midwifery, but upon the moral ground, I am quite sure that a Porro's operation is preferable to a craniotomy, for in the latter the child is inevitably destroyed, and the mother runs as great a risk as I think she would in Porro's operation. I feel certain that the decision of the profession, on this point, will be before long to give up these operations destructive to the child, in favor of an operation which saves it and subjects the mother to little more risk, and which has the great advantage that it prevents her from being subjected to a similar risk in future.

---

### The Treatment of Profuse Hæmoptysis.

---

IN discussing the treatment of hæmoptysis, of course only the cases in which the hemorrhage is profuse need to be considered, for slight hæmoptysis requires no definite treatment. In the treatment of the serious form the general methods employed must be the same as that for profuse hemorrhage from other parts of the body; and although containing no new points, the paper recently read by Dr. Samuel West before the Medical Society of London (*Brit. Med. Journ.*, January 16, 1886,) contains the most successful methods, brought together in such a succinct way that it is worthy in being laid before our readers. Dr. West shows that rest, absolute of the body as a whole and of the diseased part so far as possible, is the main essential principle; and with this object in view the patient should be kept in a recumbent position, speaking prohibited, cough checked, and excitement avoided, or, if present, controlled by drugs. These indications are best met by the use of opium, which Dr. West regards as indispensable in most cases of hæmoptysis. Of the so-called hæmostatic remedies two groups may be formed—the topical astringents and the vascular constrictants. Chief among the former are the perchloride of iron, alum, gallic and tannic acids, and ace-



tate of lead ; but, powerfully as these remedies act when applied to the bleeding surface, it is difficult to see how they can produce the same local effect when administered by the mouth, for it is hard to comprehend how a few minims of dilute solution introduced into the stomach can produce an effect which the undiluted solution can effect only when applied directly to the bleeding surface ; consequently, if they act at all, it must be by producing vascular constriction. Of the groups of remedies which produce vascular contraction, digitalis and ergot are the most prominent examples. Both of these drugs produce contraction of the peripheral arteries, and if hæmoptysis were due to capillary oozing they might possibly arrest the hemorrhage, but we know that hæmoptysis is not due to capillary oozing, but to lesions of fairly large vessels. Hence these remedies, instead of being useful, may be even dangerous, and increase the hemorrhage. Hæmoptysis always tends to stop itself, from the fact that the blood-pressure is reduced from the loss of blood, and the greater the reduction the greater is the tendency to form a clot. This fact has long been recognized, and therefore one of the early standard methods of treatment of hæmoptysis was to produce hemorrhage from other parts by free blood-letting ; and although blood-letting is now believed to be indicated in but very few cases, an attempt may be made to reach this end, not by removing the blood from the body, but by detaining it in some part of the body distant from the seat of the hemorrhage. This may be, to a certain extent, accomplished by extensive dry cupping, or by dilating some of the vast vascular systems of the body and making them act as temporary reservoirs for the blood. This might possibly be accomplished by producing purgation, or the cutaneous system might possibly be dilated through pilocarpine, or even nitrite of amyl ; however, the possible objection to the use of these drugs is they dilate the vessels of the lungs as well. Then, again, the blood-pressure may be influenced through the heart, as by the use of cardiac depressants, of which antimony is the most reliable ; while, lastly, diet is of the very greatest importance. The principle of absolute rest and restricted diet should be applied in all cases of hemorrhage. It is thus seen that without giving a long list of drugs, or discussing in detail the various methods of treatment of hæmoptysis, Dr. West indicates the conditions which have to be fulfilled and the essential principles which should guide our choice of rem-

edies. Our treatment of hæmoptysis is as yet extremely unsatisfactory, and perhaps the following out of some of the lines of treatment suggested above may lead to valuable results:

#### EXPERIMENTS WITH NUMEROUS DRUGS ON THE BACILLUS TUBERCULOSIS.

If Koch's bacillus tuberculosis is actually the cause or infectious agent of tuberculosis, the labors of Sormani and Bognatelli to ascertain the effect of various drugs on the microbe are in the right direction to possibly advance the therapeutic aspects of this affection. We abstract from their papers, "Ricerche Sperimentali sui Neutralizzanti del Bacillo Tubercularia Scopo Proflatico" and "Ulteriori Ricerche sui Neutr. del Bac. Tuberc.," Milano, 1885, simply their general conclusions.

Both authors tested a number of chemicals, especially such which could be therapeutically considered as to their influence upon the vitality of bacillus tuberculosis. One c. c. (16 gtt.) of sputum, in which the presence of a large number of bacilli was previously ascertained, was, under the ordinary precautions, mixed with a certain quantity of the drug to be tested, the mixture preserved at a temperature of 35° to 40° (C.) one to two hours, then mixed again, and by means of a disinfected syringe injected in the abdominal cavity of guinea-pigs. These animals, unless they died sooner, were killed after two or three months, and examined for bacilli. A large number of drugs showed no or a very slight pertinent action. An appreciable antibacillar effect was obtained from the following drugs in an ascending order: lactic acid, camphor, bromide of ethyl, naphthol, turpentine, chloride of palladium, creasote, carbolic acid, and corrosive sublimate. The following drugs showed likewise some antibacillar virtues; benzine, toluol, oil of carraway, essence of cloves, guajak, chinolin, menthol, and creasote.

---

#### Pessaries: Indications for, and Methods for Their Treatment.

---

IN a clinical lecture by Dr. H. K. Leake, published in the *Texas Courier-Record of Medicine*, he remarks as follows upon the subject of pessaries: My method of placing pessaries is, so far as I can learn, different from that of all others

who use them. The Sims speculum dilates the vaginal canal and reveals to the critical eye of the surgeon its whole extent, thus enabling him to perform operations within its cavity with as much ease as those he undertakes on the exposed parts of the body. Why not utilize the same means for the perfect fitting and introduction of pessaries? For illustration, take a case of retroversion. The patient lies in Sims' position with the perineum well retracted by the speculum in the hands of a qualified assistant. The spirit lamp used in modeling your instrument burns brightly on a table at your left hand. You now introduce well into the cavity of the uterus, the Elliott or Emmett's repositor, and reversing the action of the instrument you have the satisfaction of witnessing the organ revolve, right under your eyes, into its normal position. The repositor being now withdrawn, it is replaced by the sound, the handle of which is given to the assistant, who holds the uterus in its new position, until a pessary can be fitted to the conformation of the vagina and cervix. Experience will enable you almost at a glance to determine the size and shape of the pessary required. Having heated the hard rubber over the spirit flame, its curves are unbent or increased, its fenestra widened or narrowed, or any other form given the instrument which is desirable, before leaving it permanently in position. Resuming control of the sound, its handle is passed through the fenestra of the pessary and the latter strung along the continuity until the cervix is reached, when by tilting up the lower end, or depressing the upper bar, the latter glides readily in position up behind the cervix; after which the sound is withdrawn and the speculum removed. The patient is now made to stand erect and is subjected to a final examination. The index finger, well lubricated, being introduced into the vagina and carried up to the vault, is swept around the cervix noting the position of the pessary and effect, if any, produced upon the affected organs. This plan of fitting and introducing pessaries seems to be the most rational of any yet recommended. Indeed, I do not see how it is possible in any other way to conform the outlines of the instrument to the anatomy of the vaginal walls and cervix, and thus meet the exact requirements of each case. The same position is to be recommended also in reëxamining and refitting pessaries, the precaution being to inspect them before removal.

All patients who have had pessaries introduced for backward

displacement should be instructed in the knee breast position advised by Dr. Campbell. They should assume this for at least five minutes night and morning. By this rational procedure the strain upon the pessary is lessened somewhat, thereby assisting its traction-lever power. Moreover, the blood, which has yet a tendency to stagnation in the weakened and dilated vessels of the displaced uterus, as well as other organs contiguous thereto, flows out and seeks remote areas in the head and trunk of the body, which is placed by this maneuver on a lower level. Thus the weight of these organs is diminished, a better circulation favored in them, and much comfort, if even for a short time, afforded the patient. A special injunction should, for obvious reasons, be given regarding the rectum and bladder, which should be kept as empty as is consistent with health; and all straining and lifting interdicted. Corsets should not be worn, and the under garments must be suspended from the shoulders. Vaginal injections of hot carbolized water should be directed once daily at least, and in using them a large amount of water employed; but care will be necessary in taking them lest the pessary be floated from its position by the force or largeness of the stream. The syphon syringe is, except in special cases, to be preferred. Iron tonics should be regularly administered; those containing strychnia being the best—its special action is assumed, being exerted upon the muscular tissue of the uterus as well as that of the ligaments.

The following conclusions seem warranted from the foregoing discussion of this subject:

1st. That while there exists great difference of views as to the expediency of using pessaries, the practical gynæcologist also is influenced in his opinions by his own individual experience, and will not servilely bow to the authority of those who, perhaps, rejected such aids on insufficient grounds.

2d. That the classical pressure symptoms, including weight in the pelvis, sacralgia, bladder and rectal irritation, difficulty and pain on locomotion, dragging pains in hips and lower abdomen, etc., combined or uncombined with systematic effects, are relieved by a skillful adjustment of pessaries, and must be continued to be held as an indication for their employment.

3d. That in all cases of anæmia, neurasthenia, hysteria, presenting themselves, the cause may be located in some



displacement of the pelvic organs, and this point should be determined by immediate examination.

4th. That due regard must be had to the natural mobility and normal position of the uterus in the placing of pessaries.

5th. That, contrary to the general view, retroflexion can be redressed and maintained in position by a skillful adjustment of the traction lever pessary.

6th. That pessaries should be fitted and placed with the patient in Sims' position, this being the most favorable for such procedure.

7th. That, while the evidence thus far has been discouraging as to the curability of uterine displacements by means of pessaries, we must, at least, acknowledge their powerful aid as palliatives, and we are justified in believing that the future statistician will demonstrate their greater efficacy in tables showing permanent results.

---

### The Management of Placenta Prævia

---

DR. MALCOLM MCLEAN offers the following rules as those which should best govern the treatment of placenta prævia (*Amer. Journ. Obstetrics*, March, 1886):

*First.* In any case avoid the application of all chemical styptics, which only clog the vagina with inert coagula, and do not prevent hemorrhage. At the very first, the patient should be put in a state of absolute rest—body and mind—and a mild opiate is often desirable at this stage to quiet irritation.

*Second.* Inasmuch as the dangers from hemorrhage are greater than all else to both mother and child, at the earliest moment preparations should be made to induce premature labor; and labor being once started, the case should be closely watched to its termination by the accoucheur.

*Third.* In primiparæ, and mothers with rigid tissues, the vagina should be well distended, by either the colpeurynter or tampon, as an adjuvant to the cervical dilatation.

*Fourth.* In the majority of cases generally, and in all cases especially where there is a reason to believe that rapid delivery may be required, it is more safe to rely upon the thorough, continuous hydrostatic pressure of a Barnes dilator than on pressure by the foetal parts.

*Fifth.* Where the implanation is only lateral or partial, and where there is no object in hurrying the labor, bipolar

version, drawing down a foot and leaving one thigh to occlude and dilate the os, may be practiced according to the method of Braxton Hicks, except in cases where the head presents well at the os, when,

*Sixth.* The membranes should be ruptured, the waters evacuated, and the head encouraged to engage in a cervico-vaginal canal.

*Seventh.* In the majority of cases, podalic version is to be preferred to application of the forceps within the os.

*Eighth.* In some cases, in the absence of sufficient assistance or the necessary instruments, the complete vaginal tampon, in part or wholly of cotton, may be applied and left *in situ* until (within a reasonable time) it is dislodged by uterine contractions and the voluntary efforts of the mother. In case of favorable presentation—occiput or breech—the tampon will not materially obstruct the descent of the child, and in some cases the tampon, placenta, and child will be expelled rapidly and safely without artificial assistance.

*Ninth.* The dangers of septic infection by means of the tampon or india-rubber dilators are so slight, if properly used, as not to be considered as seriously impairing their great value.

*Tenth.* Whenever it is possible, dilatation and delivery ought to be deliberately accomplished, in order to avoid maternal lacerations.

*Finally.* As cases of placenta prævia offer special dangers from post-partum hemorrhages, septicæmia, etc., the greatest care must be exercised in every detail of operation and nursing to avoid conveying septic material to the system of the mother.

Absolute cleanliness, rather than chemical substitutes for that virtue, should be our constant companion in the practice of the obstetric art.

---

HYOSCYAMINE IN CHOREA.—Dr. Da Costa recommends hyoscyamine in chorea in the following dose: 1-200 of a grain three times a day, the dose being doubled if necessary. He records a case treated in the Pennsylvania Hospital of a boy eleven years of age suffering with chorea to a degree which rendered him completely helpless; he was unable to walk or feed himself, and he had not sufficient control over his powers of speech to convey even the nature of his wants. In four days after the administration of the drug he

was able to walk about the wards, and his condition underwent steady improvement, until, three weeks from the date of admission, his muscular system had regained its normal condition, and locomotion was in every way natural.

---

## Microscopy.

---

A NEW MICRO-ORGANISM OF PHTHISIS.—Two French observers, MM. Duguet and Hericourt, claim to have discovered that the very common fungus, so often seen on the bodies of the phthysical, causing pityriasis versicolor, may itself be a cause of phthisis.

In some cases of acute phthisis the tissues were found to contain no bacilli, but there were observed the mycelia, identical with, or allied to those of the *microsporon furfur* (the fungus of pityriasis). Similar mycelial threads were also found in the expectoration mixed with the bacilli. When the *microsporon furfur* is cultivated and injected into guinea-pigs and rabbits, these animals become, without exception, tuberculous, and the same result is obtained by insufflation into the trachea of the crusts of pityriasis. Moreover, the cultures of *microsporon furfur*, of tubercle produced from the fungus, and those from tubercles of man are precisely the same in character. Cultivations can be made in slightly alkalized bouillon or in milk, when it becomes possible to distinguish an ærobic and an anærobic element. The former floats at the surface, and at a temperature of from 30 to 38 degrees C. forms a thick membrane composed of bacilli. The latter is found at the bottom of the cultivation-tube as a mass of granulations and mycelium. The polymorphic character of the tubercle bacillus is thus, says the *Lancet*, manifest, and the opinion of Spina receives support as to the variety of forms of microbes in tuberculosis.

It seems more probable, however, that the observations of Duguet and Hericourt were not carefully made.—*Medical Record*.

---

OF EELS IN PASTE.—Whoever is desirous to be furnished with *minute eels* always ready for the microscope, needs only boil together a little flour and water, and make such paste

thereof as bookbinders commonly use ; or it may be bought of them. It should neither be very stiff, nor very watery, but of a moderate consistence. Expose it to the air in an open vessel, and prevent its hardening or becoming mouldy on the surface, by beating it well together when you find any tendency that way; for if it grows hard or mouldy, your expectation will be disappointed. After some days it will turn sour, and then if examined attentively, you'll discern multitudes of exceedingly small, long, slender, wriggling *animalcules*, which grow larger daily, till you'll be able to see them with the naked eye.

To promote their coming forward, pour every now and then a drop of vinegar on your paste ; and after they are once produced you may keep them all the year, by putting to them sometimes a little vinegar or water, if the paste becomes too dry, and sometimes a little supply of other sour paste ; taking care continually to preserve the surface in a right condition, which will easily be done when it is well-stocked with these *animalcules* ; the continual motion of them preventing any moldiness thereon.

A water-glass, or some other glass vessel, is the most convenient to keep your paste in ; for by holding it up against the light, you'll oftentimes perceive the *eels* wriggling themselves above the surface of the paste upon the sides of the glass, and may be able to take several of them with a pen or hair pencil, much more disengaged from the paste, and consequently fitter for view, than if you are obliged to examine the paste itself in order to find them in it.

Apply them to your microscope upon a single talc or isinglass, after having first put on it a very small spot of water for them to swim about in. The thicker your paste is, and the more they are enveloped in it, the greater proportion of water will be requisite to dilute it, that they may disengage themselves, and be rendered distinctly visible.

They are very entertaining objects, examined by any kind of a microscope, but particularly the solar one, by which I have magnified them sometimes to an inch and a half, or two inches in diameter, with a length proportionable, and have found them answer exactly the appearance of such sized eels. The internal motion of their bowels may very plainly be distinguished, and when the water is dried almost away, and they are near expiring, their mouths may be seen opening to a considerable width.—*From Henry Baker, written in 1743.*



## Gleanings.

---

A TEST FOR SUGAR IN THE URINE.—A Philadelphia correspondent of the *Atlanta Medical and Surgical Journal* states that it might be of interest to mention a convenient substitute for Fehling's solution in testing for sugar in the urine. The ordinary solutions deteriorate on keeping, and are liable to throw down the sub-oxide of copper themselves if they have not been freshly prepared. Prof. Holland, in his lectures on chemistry, at Jefferson Medical College, gave the following test fluid, which is very efficient, is easily prepared, and is not spoiled by keeping:

### GLYCERINE CUPRIC SOLUTION.

R Cupric sulphate . . . . . 3j  
Glycerine . . . . . f3j

To make the test add five drops of this solution to one drachm of liquor potassæ, in a test-tube. Boil a few moments to test the purity of the fluid; should it remain clear then add a few drops of urine. If glucose be present in quantity, there is at once thrown down a red precipitate, just as in the ordinary Fehling's test. To detect minute amounts of sugar, not shown by above procedure, after making the test as above, add half a drachm of urine, boil and set aside. If sugar be present, even in very minute quantity, the liquid, as it cools, will turn to an olive green color and become turbid.

NORTHWESTERN LANCET.—Editor of *Northwestern Lancet*: Not long since I had brought to me a child of six months, suffering from the following symptoms:

Constipation, sometimes irregular action of bowels, regurgitation of food and an asthmatic cough. Its mouth was full of thrush sores, and its appearance one of poor nourishment.

It had been given a number of Infants' Foods in vain, one of which I prescribed myself.

By means of mild medication, directed toward the cough and stomach, something was accomplished. Finally I gave "CARNRICK'S SOLUBLE FOOD," and had the satisfaction of having it retained, and at last accounts the child was doing nicely.

I am inclined to think this food is worthy of attention on the part of the profession.

It recommends itself in that it contains caseine, rendered soluble by pancreatine, starch converted into dextrine and maltose. Hence it requires but little preparation, and that is so simple, mistakes can not occur.

It requires no addition of milk.

It has the advantages and none of the disadvantages of the many foods now in the market, and forms a nearly physiological substitute for mother's milk. Very truly,

ST. PAUL, June 1, 1886.

C. F. DENNY.

THE PREVENTION OF MAMMARY ABSCESS.—Philip Miall, Consulting Surgeon to the Bradford Infirmary, says in the *British Medical Journal*: A method of treating inflamed breast after delivery may be worth notice in connection with Dr. Edis' paper on the use of support by a bandage or towel. Dr. Edis appears to use his method after every delivery, and by beginning it before lactation is established, assures success; but one occasionally sees cases where abscess is on the point of forming, either from neglect or injudicious treatment, and where, consequently, something more is required.

I have repeatedly seen a hot, heavy inflamed breast, with redness of skin, throbbing and deep-seated pain, the pulse being 120 in the minute, yet these symptoms have disappeared in the course of a few hours under fomentation with hot water and ammonia. An ounce of carbonate of ammonia is dissolved in a pint of boiling water, and, when solution is effected, the temperature will scarcely be too high for fomentation with cloths dipped in the liquid. These must be assiduously applied for half an hour at least, and repeated two or three hours later if necessary. It is well to protect the nipples, though I have never known them to be injured. Relief is immediate, and more than three applications are seldom required.

Unless applied too late, or improperly, or some foolish rubbing or drawing with the breast-pump be used, contrary to orders, this remedy may be thoroughly relied on. I am indebted for it to Mr. Douglas, of Banbury; and as it has had a trial of thirty years in my hands, I can speak of it with some confidence.

TUBERCULAR MENINGITIS CURED BY IODOFORM.—A Swedish physician, Dr. Emil Nelson, alleges that he has cured an undoubted case of tubercular meningitis by frictions on the shaved scalp with iodoform ointment (1 to 10). The patient

was a boy, aged eight, whose mother had a family history of phthisis, and four of whose brothers and sisters had died from tubercular meningitis. The symptoms in this child's case were similar to theirs—headache, torpor, convulsions, strabismus and pyrexia. He was at first treated with calomel and iodide of potassium, but did not improve; and, after having been under treatment a week, became distinctly worse, being unable to take food or medicine. The pallor of the face, which had preëxisted, gave way to flushes of the cheeks. The child threw himself out of bed, and presented severe clonic spasms of the limbs and of the facial muscles. The head was then shaved and iodoform ointment rubbed in, an oilskin cap being put on. The friction was repeated three or four times in the day, and the next day there was a decrease in the convulsive movements, the sleep was calmer, and spasmodic contractions, which had previously been excited by the slightest noise, now ceased to be so. Consciousness shortly afterward returned, and the child's face became of a more natural color. This, however, was accompanied by a severe coryza, redness of the lips, and irritable cough, the breath smelling strongly of iodoform. The ointment was discontinued, and syrup of iodide of iron given. The unpleasant symptoms rapidly disappeared, and the child was soon running about in good health.—*British Medical Journal*.

DOVER'S POWDER AND ITS MODIFICATIONS.—In the *Asclepiad*, 1885, Dr. Richardson speaks of Dover's powder: "In many cases there is no anodyne equal to Dover's powder, no other such a soporific febrifuge. If I could envy any one as a therapist, it would be the old physician who originally had the happy thought of blending astringent opium with relaxant ipecacuanha, and both with a diuretic and laxative. I suspect that Dover's name, though so little is known of the man himself, is more frequently quoted than that of any other physician. It is very often a good plan to modify Dover's powder by employing other salines than sulphate of potassa. The true Dover's powder contains nitrate of potassa as well as sulphate, four grains of each; and it often seems to me reasonable to revert to this form, as the nitrate of potassa in small doses is so good a diuretic. I also often venture to use other modifications with advantage. In acute rheumatic fever I usually substitute sodium salicylate for the potash salts; in gout, bicarbonate of soda; in remittent

febrile cases, two grains of quinine with five of sodium salicylate; in tonsillitis and other febrile throat-affections, chlorate of potassa. It would surely be worth the time and skill of one of our scientific pharmaceutical brethren to prepare and bring out a series of Dover's powders in these modified forms."

MYRTOL.—Myrtol has only been, hitherto, studied as a curiosity. Dr. Linarix, in his doctoral thesis, *De l'Emploi du Myrtol*, gives a complete account of the properties of this substance. Myrtol is both an antiseptic and a disinfecting agent. By its presence it prevents the decomposition of fermentative and putrescible organic substances; applied to the skin, it does not produce the slightest irritation, if the epithelium be intact. If there be a slight abrasion, a few drops will produce a very trifling burning sensation, which quickly goes off. Myrtol stimulates the digestive faculties; all who use it find their appetite increased. In small doses it acts as a sedative. It is eliminated by the lungs and kidneys, and has also a powerful balsamic action, but is more easily tolerated than most balsams. Its use is not followed by dyspepsia, nor by any of the other troubles attending the use of balsams in general. Dr. Linarix says that myrtol does not produce the same result at all periods of the affections of the respiratory system; in subacute and chronic catarrhal affections, it should be administered when fever has subsided; then the sputa become less abundant, also less purulent. Six capsules daily, each containing fifteen centigrammes of myrtol, form a moderate dose, which should be taken before meals.—*British Medical Journal*.

PRURITUS OF WOMEN. — LOCAL TREATMENT. — All acquainted with the incessant suffering which some women undergo from pruritus at the period of the menopause must be very desirous of being made acquainted with a prompt remedy for so distressing an affection. Whether it arise from the presence of prurigo, urticaria, eczema, herpes, or whether it exists without any eruption at all, it is alike difficult to allay, as the great number of remedies which have been proposed testifies. Of these veratria is by far the most efficacious. When the pruritus is localized at groins, armpits, walls of the abdomen, or behind the ears, gentle friction night and morning with an ointment consisting of thirty parts of lard and a quarter of a part of veratria, usually gives relief. When the pruritus is generalized, the internal



administration of the veratria is preferable. Two centigrammes should be made into ten pills with liquorice powder, of which from two to six should be taken daily, either half an hour before, or three hours after meals. Only one should be taken at a time, an additional one being given each successive day until the maximum of six (three milligrammes) is attained.—*Dr. Chévo in Le Progres Medical.*

**HYPODERMIC INJECTIONS OF COLD WATER IN SCIATICA.**—Dr. D. H. Lewis, of Lone Pine, Pa., writes to the *New York Medical Record* for January 23, 1886, that he was consulted by a man sixty years of age, who was suffering greatly from sciatica. He had been treated for the past eight weeks by two physicians, and had run through the entire list of anti-neuralgic remedies. Being desirous of trying something which was at least new to the patient, Dr. Lewis determined to employ hypodermic medication, and having no drug handy which he cared to use, he filled the syringe with cold water and injected the fluid deep down behind the trochanter. The following day the patient returned and said he was feeling much better. The injections were accordingly repeated every third or fourth day for a period of three weeks, by the end of which time a complete cure was obtained. The writer has since treated a number of cases of sciatica in the same way, with equally gratifying results. He thinks that possibly many of those cases which have been reported as cured by the injection of certain drugs, such as cocaine, might have terminated in an equally favorable manner had simply cold water been used.

**REMOVAL OF FOREIGN BODIES FROM THE EAR.**—Jonathan Hutchinson, in the *Br. Med. Jour.* says: I have never, since I was a student, used either forceps or scoop; and, for the purpose of extracting hard bodies from the ear, I hold that they are most dangerous. With a flexible silver wire loop, or, if need be, with two placed at right angles, I have repeatedly succeeded when all other means had failed. Thus, not only is the loop quite devoid of danger, but it is both more easy of use and far more efficient than any other method. It is impossible that it can injure the membrana tympani, or the walls of the canal. The method of procedure is, after having put the patient under an anæsthetic, to introduce the loop gently into the ear, and turn it about until it is believed to have got behind the foreign body.

This it will often do at once ; but sometimes a little patience is necessary. In one instance I took out a piece of heavy lead in this way with very little trouble, using two loops at right angles with each other. The simplicity, safety, and efficiency of the method make it desirable that it should be better known.

THE ACTION AND USES OF CHLORATE OF POTASH.—Dr. Von Mering, as the result of experiments with this drug, holds that the following considerations should guide us in the administration of this remedy: First, the salt should be given after meals; second, quite an interval should occur between the several doses; third, the salt should not be given in high fevers on account of the diminished alkalinity of the blood; nor in respiratory trouble, such as emphysema pneumonia, and in the dyspnœa attendant upon obstruction of the larynx by croup and diphtheria and the cyanosis of valvular disease of the heart; a contraindication exists in renal mischief attended with diminished excretion.

THE TREATMENT OF HÆMOPTYSIS.—Dr. Horace Dobell recommends the following prescription for the reasons given:

R̄	Ext. ergotæ . . . . .	ʒii
	Acidi gallici . . . . .	ʒi
	Mag. sulph. . . . .	ʒp
	Acid sulph. dil. . . . .	ʒi
	Inf. rosæ acidi ad. . . . .	ʒviii. M

SIG. Take two tablespoonfuls every two hours. The ergot contracts the capillaries; the gallic acid is an immediate styptic; the Epsom salts relieves congestion; the digitalis steadies the heart; the sulphuric acid is also a styptic, and the infusion of roses is the menstruum for the administration of the other drugs.

CAUTION IN THE USE OF IODINE COLLODION.—The application of this mixture has not been unattended with considerable danger—mortification, as in the case of fingers, following its use. Dr. Vogelsang has pointed out that when painted upon quite a broad expanse gangrene of the skin and sloughing may occur, and that the parts most obnoxious to its use are scrofulous or other glandular swellings in the neck. Dr. Vogelsang is of the opinion that the iodine is to be considered as the cause of the gangrene. He assumes that under the impervious film of collodion, an

intensified chemical action of the agent takes place, leading to the coagulation of blood in the capillaries and death of tissue.

CIRCUMCISION.—Dr. A. B. Arnold read a most exhaustive paper on this subject, in which he treated the subject from a moral as well as a historical and surgical standpoint.

He protested against the practice, not only because he considers it detrimental in robbing the glands of their natural protective covering, and thus exposing to irritation the very sensitive Pacinian bodies about the corona, but because the result of this exposure and consequent irritation, he thought, led to habits of masturbation.

In answer to the question, "Had any hereditary shortening of the prepuce been observed in Hebrew children as a class?" he said he had noticed nothing different in the formation of the foreskin in them from that of other children.

Dr. J. Edwin Michael thanked Dr. Arnold for his paper. He had some time since read an article on the subject from a surgical standpoint. In his experience he has frequently been called upon to remove the prepuce because of its inconvenience. As to affecting the sensitiveness and irritability of the glands, he did not see that the operation made any difference whatever, for how very often do we see men with naturally exposed glands from an abnormally short prepuce. They present no greater degree of sensitiveness. He thought with some eminent authorities, that the sensitiveness of the glands is increased by circumcision of a long prepuce and the irritability decreased.

BELLADONNA AND IODIDE OF POTASH.—M. Aubert states that in certain individuals in whom small doses of the iodide of potash produce violent reaction in the naso-pharyngeal mucosa, extracts of belladonna, in daily doses of five centigrammes, continued for a few days, will allow the iodide to be used without untoward symptoms.—*Coronica Med. Quirurgica de Habana*.

PURIFYING POLLUTED WATERS.—Probably the best material for domestic filters is spongy iron, being superior to animal charcoal, and Bischof, a good authority, lately informed us that filtration through the iron destroys bacterial life, and that water so filtered is incapable of inducing putrefaction in animal matters. Frankland, in his recent investigations, arrives at the same conclusion, and is much in favor of the use

of spongy iron for the purification of polluted waters. Then, if polluted water must be used, it should by all means be filtered, and, if there is any suspicion of disease germs, for domestic purposes it should be boiled from one to two hours and put in closed earthen or glass vessels in a cool spot for several hours before drinking. The flatness of taste can easily be removed by repeatedly pouring it from one vessel to another until sufficiently aerated. A fresh supply should be prepared every twenty-four hours.—*Vander Veer, in N. Y. Med. Journal.*

ICHTHYOL.—Dr. Lorenz recommends ichthyol in a variety of cases. In a 30 per cent. solution, it relieves the severe itching of senile prurigo; for pruritus a weaker solution is used, namely, 10 per cent. As an application to slowly granulating burns and ulcers, he has had excellent results; and internally, in doses of four tablespoonfuls of a 1 per cent. solution in the day, he has relieved the symptoms—vomiting, etc.—of catarrh of the stomach.

---

## Book Notices

---

THE SURGICAL DISEASES OF CHILDREN. By Edmund Owen, M. B., F. R. C. S., Surgeon to the Hospital for Sick Children, Great Ormond Street, London. 12mo., 585 pages, with 4 Chromo Lithographic Plates and 85 Engravings. Cloth, \$2.00. Philadelphia: Lea Bros. & Co. Cincinnati: R. Clarke & Co., 1886.

This work belongs to the series of "Clinical Manuals for Practitioners and Students of Medicine," published by the Messrs. Lea Brothers & Co., of Philadelphia. We have frequently noticed and commended the volumes of this series in previous issues of the MEDICAL NEWS.

A practitioner soon becomes aware that the surgery of children is quite different from the surgery of adults—as much so indeed as the child differs from the man. The same diseases in children have often many symptoms that are not present in adults, besides differing in their course, complications, pathological products, treatment, etc.

Practitioners and students of medicine will find this a very interesting and valuable work, affording much informa-



tion that can not be found elsewhere. While the author has avoided prolixity, he enters sufficiently into detail to afford a very satisfactory knowledge of the subjects treated. He maintains throughout the very desirable medium between unnecessary amplification in discussion and too meager description.

Mr. Owen exhibits a very thorough knowledge of the character of children, and gives some excellent advice in regard to their examination. He says that the surgeon should not go straight to the patient and begin asking questions bearing on the case. Generally it is advisable to take no notice of him for a little time after entering the room. But after addressing him, it is not best to immediately give attention to his complaint. He regards it of primary importance to gain at first the confidence and goodwill of the young patient.

The first chapter is devoted to introductory remarks. Subsequent chapters treat of croup, diphtheria, laryngitis, tracheotomy, syphilis, rachitis, deformities, tumors, nævus, hydro-thorax and empyema, burns and scalds, the various paralyses, malformations in head and neck, harelip, cleft palate, foreign body in windpipe, scald of fauces, spina bifida, genito-urinary tract, rectum, intestinal obstruction, hip joint disease, diseases of the other joints, fractures, dislocations, hernia, and many other subjects.

---

DISEASES OF THE DIGESTIVE ORGANS IN INFANCY AND CHILDHOOD, with Chapters on the Investigation of Disease, and on the General Management of Children. By Louis Starr, M. D., Clinical Professor of Diseases of Children in the Hospital of the University of Pennsylvania, etc. With Colored Plate and other Illustrations. 8vo. 385 pages. Price, \$2.00. Philadelphia: P. Blakiston, Son & Co. Cincinnati: R. Clarke & Co., 1886.

It has been the author's object in preparing this work to give prominence to a class of disorders constituting a large proportion of the ailments of childhood, but often too briefly considered in works on pediatrics. "For the successful treatment of the diseases of the digestive organs in infancy and childhood, attention to the general regimen is quite as important as the administration of drugs, and it is

upon the former that the student and young practitioner are usually the least thoroughly instructed."

The author gives especial attention to the selection of suitable food for infants and children, to artificial digestion, to regulating the clothing, to bathing, and other elements of hygiene. These are most important subjects, being primary factors in the welfare of the very young. It is estimated that two-thirds of the infants born into the world die before reaching the age of two years. To what can be ascribed the cause of such a fearful mortality but ignorance on the part of parents of the simplest principles of infantile hygiene? But important as are the enforcement of sanitary laws in health for its preservation, of the highest importance is their observance in the treating of infantile diseases. In many of the ailments of infants, the regulation of dress, the selection of proper food, and the administration of suitable artificial digestive agents will be all that will be necessary to be done for the restoration to health.

But Prof. Starr does not propose, in his work, to limit the treatment of the diseases of the digestive organs of children to the regulation of the sanitary conditions surrounding them. While he gives much attention to the hygiene of children, he describes very fully the therapeutic agents that are best employed to meet whatever indications may present themselves. The work contains many very valuable formulæ as a guide to the practitioner in making his own.

While older members of the profession will find in the work many valuable suggestions, we would recommend the attentive study of it by all young physicians, who have not yet had the opportunity of acquiring much experience. We feel sure that the lives of many little ones would be saved if the principles set forth in this volume were adopted in the treatment of the disorders which it describes.

We will mention that a chapter of the work is devoted to the investigation of the diseases of children generally. Although it does not necessarily belong to a work of the kind, it will undoubtedly be found very acceptable.

---

THE STUDENT'S MANUAL OF VENEREAL DISEASES. Being a Concise Description of Those Affections and of Their Treatment. By Berkeley Hill, M. D., Prof. of Clinical Surgery in University College, London, etc., and Arthur

Cooper, M. D., Surgeon to the Westminster General Dispensary. Fourth Edition. Revised. 12mo. Pp. 132. Cloth. Price, \$1.00. Philadelphia: P. Blakiston, Son & Co. Cincinnati: R. Clarke & Co., 1886.

It has been the object, in the preparation of this little work, to place before the student and physician, as concisely as possible, the main elementary facts relating to venereal diseases and their treatment. Dr. Berkeley Hill has been well-known, both in England and this country, for many years, as an eminent specialist in venereal diseases. He has written much upon them, and he is regarded as an authority.

Concise as is this little volume before us, it really contains about all the main elementary facts embraced in the subjects of syphilis and gonorrhoea. We do not know of any work devoted to venereal diseases that is so well adapted for the use of second-course students preparing for final examinations—for graduation, positions as internes to hospitals, for license to practice medicine before State Boards, etc. Although the descriptions are necessarily brief, yet the brevity is brought about not by the omission of important facts, but by the exclusion of useless verbiage.

---

A COMPEND OF PHARMACY. By F. E. Stewart, M.D., Ph.G., Quiz-Master in Chemistry and Theoretical Pharmacy in the Philadelphia College of Pharmacy (Alumni Quiz); Lecturer on, and Demonstrator of, Pharmacology in the Medico-Chirurgical College of Philadelphia, etc. Based upon Prof. Joseph P. Remington's "Text-book of Pharmacy." 12mo. Pp. 196. Cloth. Price \$1. Philadelphia: P. Blakiston, Son & Co. Cincinnati: R. Clarke & Co. 1886.

This little work forms No. 11 of the series of "Quiz Compend?", published by the Messrs. Blakiston, Son & Co., of Philadelphia, several of which we have noticed. Medical students are greatly indebted to these publishers for these Compend.

The "Quiz Compend?" before us is designed not only for medical students, but for students of pharmacy. As its title implies, it is devoted to imparting information in regard to the articles of the *materia medica*, their preparation into medicines for the treatment of disease, etc.

As stated by the author, "the collection of substances employed in medicine is called the *Materia Medica*; the substances are known as drugs. *Pharmacy* is the science of preparing these substances. *Therapy* is the science of applying them to the treatment of the sick. These three branches are properly classified under the general head *Pharmacology*, or, the *Science of Drugs*."

*Materia medica* and *therapy* are branches of medicine that are of the greatest practical importance to physicians and pharmacists. A work, therefore, like this Compend, which very concisely, but quite fully, sets forth the main facts of these departments, should be carried about by students preparing either to prescribe or dispense medicines, and taken out and studied whenever a leisure moment will permit.

---

DISEASES OF THE SPINAL CORD. By Byrom Bramwell, M.D., F.R.C.P. (EDIN.) Lecturer on the Principles and Practice of Medicine, and on Medical Diagnosis, in the Extra Academical School of Medicine, Edinburgh; Pathologist to the Edinburgh Royal Infirmary, etc. Fifty-three Colored Plates and One Hundred and Two Fine Wood Engravings. Second Edition. 8vo. Pp. 298. Cloth.

INSANITY AND ITS TREATMENT. LECTURES ON THE TREATMENT, MEDICAL AND LEGAL, OF INSANE PATIENTS. By G. Fielding Blandford, M.D. (OXON.); Fellow of the Royal College of Physicians in London; Late Lecturer on Psychological Medicine at the School of St. George's Hospital, London. Third Edition. Together with Types of Insanity. An Illustrated Guide in the Physical Diagnosis of Mental Disease. By Allan McLane Hamilton, M.D., one of the Consulting Physicians to the Insane Asylum of New York City, and the Hudson River State Hospital for the Insane. 8vo. Pp. 379. Cloth.

HANDBOOK OF PRACTICAL MEDICINE. By Dr. Herrmann Eichhorst, Professor of Special Pathology and Therapeutics, and Director of the University Medical Clinic in Zurich. Volume I. Diseases of the Circulatory and Respiratory Apparatus. One Hundred and Three Wood Engravings. 8vo. Pp. 407. Cloth.

THE GENUINE WORKS OF HIPPOCRATES. TRANSLATED FROM THE GREEK. WITH A PRELIMINARY DISCOURSE



AND ANNOTATIONS. By Francis Adams, LL.D., Surgeon. In Two Volumes. Volume I. 8vo. Pp. 390. Cloth.

The four works, whose titles we give above, belong to "Wood's Library of Standard Medical Authors," published by William Wood & Co., the eminent publishers of medical books, of New York. They constitute the January, February, March and April numbers of the series of 1886. We have before explained that the Messrs. Wood & Co., publish, each year, a series of twelve volumes, entitled as above, which they sell by subscription at the low price of \$15. It will be perceived that subscribers secure for themselves an unprecedented amount of medical literature for the sum they pay.

A physician can have in his library no more valuable works than the four whose titles we have given. The work of Dr. Bramwell on Diseases of the Spinal Cord has been so well indorsed that it requires no commendation. It has been so favorably received by the profession that it has been translated into the German, French and Russian languages. The many important diseases of the spinal cord are well described, the results of the very latest researches being recorded. The article upon Progressive Locomotor Ataxia, with the illustrations accompanying it, is alone well worth the price of the work. The description, however, of other spinal affections, as Chronic Myelitis, Cerebro-Spinal Sclerosis, etc., are certainly equally interesting.

The work of Dr. G. Fielding Blandford on Insanity is a standard work upon the subject. There is no more distinguished alienist in England than he, his writings being regarded as authority on all matters pertaining to affections of the mind. This volume should have a place in the library of every physician of this country, for, to the medical man, and to him only, belongs the study of insanity. Unsoundness of mind is but another term for unsoundness of brain-function—the brain being one of the great organs of the body, as are the lungs, the heart, the liver, etc. If it belongs, then, to the physician to treat diseases of these latter organs, it falls within his province to treat disorders of the brain. But when called into court as witnesses in cases of alleged insanity, physicians oftentimes seem to know no more about insanity than others who do not belong to the medical profession. Why? Simply because, while they

have given attention to the anatomy, physiology and pathology of other great organs, they have never made any study of the brain and its complex functions. Consequently, when they are examined upon disordered mental operations—disordered brain action—they exhibit disgraceful ignorance, and give countenance to the assertion that physicians know no more about insanity than others. Nevertheless, to the medical profession belongs the study of insanity, and to the physician belongs the diagnosis of it when it is present in a case. It is a branch of medicine, and can not be separated from it. The careful study of such a work as Dr. Blandford's would soon do away with the stigma which the ignorance of many of its members has brought upon the profession, of not knowing anything about insanity.

Subscribers for the Library for 1886 will find in the Practice of Medicine of Dr. Eichhorst an exceedingly practical work. The March number constitutes the first volume, which is devoted entirely to diseases of the circulatory and respiratory apparatus. We have not been informed how many volumes will compose the work, but undoubtedly there will be several.

What intelligent physician will not be pleased to have in his library the genuine works of the great physician, Hippocrates, who has been venerated in all ages as "The Father of Medicine," who was born 460 years before the Christian Era. It would be worth the labor to learn the Greek language, to read his works, but in Wood's Library for the present year the subscriber can have the pleasure of perusing them in his own language. Not very long ago we would have thought that a physician would have paid but a small price for them at \$15—the cost of a year's set of books of which they form but a fraction.



COCAINE ABANDONED IN CATARACT OPERATIONS.—Dr. A. W. Cathoren, of Atlanta, says the *Atlanta Med. and Surg. Jour.*, argues strangely against the use of cocaine in cataract operations by extraction. He states that before he began the use of cocaine, from 95 to 97 per cent. of all cataract operations by extraction proved successful, and that in a large number in which cocaine had been used he had had bad results. He has abandoned its use altogether in operation by extraction.

---

## Editorial.

---

NOTICE.—We desire to say to those of our subscribers who are indebted to us for subscription, that they will oblige us greatly by remitting without further delay. By so doing they will materially aid us, and, at the same time, have the satisfaction of fulfilling a divine injunction “to owe no man anything.”

---

A FALLACY.—It is very correctly stated in *Technics* that there is no nutriment in beef tea made from extracts. We will further assert that there is but a very slight amount of nutriment in beef tea made by boiling fresh beef in water. The albumen, which is the principal element of nutrition in meat, is coagulated by boiling, and consequently is not present in the beef tea after the meat has been removed. All the nutriment that the tea contains consists in some dissolved salts, a little soluble extractive matter, and a few fat globules floating on the surface. It can be made quite nutritious, however, by grating the meat into the tea after the boiling has been completed. Beef tea, as usually administered to the sick, would not furnish sufficient nourishment for a fly.

*Technics* says that gelatine is not nutritious, and will not keep a cat alive. But it states that beef tea and gelatine, however, “possess a certain reparative power, we know not what.” Gelatine is an element of nutrition, and, consequently, it is nutritious so far as it goes; but, of course, life can not be supported by a single element of nutrition. When beef tea is added to gelatine, the nutritive properties of the latter are greatly increased by the addition of important salines, extractive material and fat globules. We do not think, under the circumstances, it is difficult to understand how that “gelatine and beef tea possess a certain reparative power,” though either one taken alone would not support life but quite a limited period. We will mention here that we have seen it stated by certain physiologists that gelatine, although it is a non-nitrogenized material, is made to supply albumen to the body, when it alone is used as food, by some occult process of vital chemistry during digestion.

*Technics* asserts that it is a fallacy to consider arrow root nutritious. “It is simply starch and water, useful as a restorative, quickly prepared.” It is like gelatine—a single

element of nutrition. But as the body requires more than one element of nutrition in food to repair the constant waste that is going on within it, a person would starve if fed exclusively on arrow root or starch. The body must have food that will furnish to it iron, phosphorus, sulphur, salts of soda, potash, magnesia, etc., besides albumen, fibrine, fat, gelatine, sugar, etc. Arrow root does not contain the necessary constituents for supplying these, and, therefore, it can not sustain life alone for a long period.

Cheese, as stated by *Technics*, is a concentrated nutriment, and a waste repairer. While we would not advise its exclusive use as a food by any means, presuming that it contained all the elements of nutrition, yet life could be sustained by it alone, provided it was perfectly digested, for a long time. We do not believe that, as a rule, it is contraindicated on account of its being difficult to digest, as *Technics* indicates. We are of the opinion that, with the majority of persons, it is easily digested, and is a wholesome food.

*Technics* is undoubtedly correct in the statement that an "inflexible diet" can not be marked out, which shall apply to every case. "Choice of a given list of articles allowable in a given case must be decided by the opinion of the stomach. The stomach is right, and theory wrong, and the judgment admits no appeal. A diet which would keep a healthy man healthy might kill a sick man; and a diet sufficient to sustain a sick man would not keep a well man alive. Increased quantity of food, especially of liquids, does not mean increased nutriment; rather decrease, since the digestion is overtaxed and weakened. Strive to give the food in as concentrated a form as possible. Consult the patient's stomach in reference to his cravings; and if the stomach rejects a certain article, do not force it."

---

THE PURE AND IMPURE.—A correspondent of the *Medical Record* writes some very commendable sentiments in the issue of June 5 of that journal. He says:

"Every healthy, honest man may admit, with Ben Franklin, that 'the sexual passion is hard to control.' So much the more does it seem to be his duty and honor to see that he *does* control it, and it is plainly the highest duty of the physician to preach the truth to those who have not yet learned this lesson, viz., that no man, under any circumstances, or form of treatment, can escape punishment, be it more or less, who uses his sexual organs for any but their



legitimate purpose—the procreation of his kind. For, as Emerson says, ‘A man may boast that he has learned how to evade nature’s laws, but the brag is on his lips—the conditions are in his soul.’ Hence, is it not evident that when a physician takes pains to speak of his gonorrhœal patient as his ‘friend,’ and of the wretched woman as bestowing her ‘favors’ on several of his patients, and of his delightful, enthusiastic methods of prompt relief, it is only the song of the siren, leading his deluded victims on to their destruction? The doctrine taught by some respected specialists, viz., that a ‘moderate use of the sexual organs is essential to health,’ has ruined many young men and will ruin many more, and women too—in accordance with the law of supply and demand. The true principle of evolution shows that so far as men apply those scientific and rational rules of generation to themselves which they do to domestic animals, the parent is able to beget offspring somewhat better than himself, and hence the gradual improvement of the race and more frequent realization of the great desideratum, ‘A sound mind in a sound body.’ It seems to me that when a physician forgets that his chiefest and highest functions are to prevent disease and to teach the beautiful and beneficent laws of nature, he then also forgets the best interests of both himself and his profession, even though he cures his patient, as he is bound to do, by the most skillful methods at his command.”

---

LATIN.—There is very great discussion going on at the present time as to the amount and kind of education a person should have before beginning the study of medicine. As to whether a knowledge of Latin is essential there is considerable difference of opinion. We will state this, as regards our observation—the most scholarly and cultivated physicians understand Latin.

In the *New England Medical Monthly* for May, Prof. J. S. Lynch has the following to say in regard to having a knowledge of Latin previous to studying medicine :

“A translation of easy Latin prose should be required. A doctor of medicine needs Latin for several reasons. Nearly all the technical terms are Latin, or formed from the Latin. He can better understand the meaning of many English words, and especially scientific terms; and by understanding the original meaning of words or parts which form English words or scientific terms, he can remember the meanings

better. Certainly a man needs Latin enough to write a prescription. Every educated man should have some knowledge of Latin; it is such a help to understanding, and therefore, in remembering the meaning of words. Take *ponere*, to place; prefix *ex*, meaning from, out of, and we have *expose*, meaning to place out of or to place in sight. Now take *ob*, against, and we have *oppose*, to place against, to set in front of, to hinder. Then try *ad*, to, and we have *appose*, to place to, to put to, to put the question to. Then *de*, to separate, making *depose*, to place separate, to dethrone, etc. This is the way that many of our words are formed; simply by crowning some word or part of a word with one of these prepositions. This crown makes a man a duke, this a count, that a king; so this preposition makes a word mean one thing; that, entirely the opposite. With a knowledge of Latin the formation of many words and scientific terms is as easy to understand as a game of checkers; without this knowledge it is a blind game.

“The technology and terminology of medical science have always been and still are derived mostly from the Latin language; and to any one entirely ignorant of it, an ordinary medical treatise of to-day is almost as unintelligible as if written in Chinese. Studying the theory of medicine therefore, to such a one, is like trying at one and the same time to master a science and the language in which it is written. An entire lack of this knowledge, therefore, must enormously increase the difficulties which will beset the student, as well as prevent him from possessing and exhibiting that air of polish and finished culture which every physician should have.

---

DECEASE OF A VENERABLE PHYSICIAN.—We are much pained to learn of the decease of Dr. George Sutton, of Aurora, Ind., which occurred about the middle of the present month, June. Dr. Sutton was one of the most eminent physicians of Indiana. He died in the harness. Although probably seventy-five years old when he died, yet he was a man of active mind and an enthusiastic student of his profession. He frequently read papers before the Indiana State Medical Society, and was a frequent contributor to the medical journals. It is not more than six or eight months ago that we heard of his reading a paper before a medical society of which he was a member. Old men who keep their minds in active exercise as he did never suffer from any

weakening of their faculties by age. It is men and women who do but little thinking who become childish when they become old. The last time we met Dr. S., a few months ago, he exhibited as much intellectual strength and buoyancy as a young man of twenty-five or thirty years.

We regret we have not been informed of the particulars of Dr. Sutton's decease. He was a subscriber for many years of the MEDICAL NEWS.

---

TOO MANY MEDICAL GRADUATES.—Such is the opinion expressed at a recent meeting of the State Board of Illinois. A resolution was consequently passed by the Board to the effect that the continuous graduation of 45 per cent. of the total number of matriculates of a medical college—due allowance being made for the average annual loss—must be accepted as *prima facie* evidence that practically every candidate is graduated without regard to competency or qualification; that it be resolved that no medical college be recognized as in good standing with the meaning and intent of the act to regulate the practice of medicine in the State of Illinois, the aggregate graduates of which amount to 45 per cent. of its aggregate matriculates during a period of five years ending with any session subsequent to the session of 1885-86. The report of the secretary showed that 127 certificates and licenses had been granted to physicians upon diplomas of medical colleges, and eight certificates were refused. During the last four years the average number of successful candidates in the examinations of the Board is 18.9 per cent.

---

THE DANGER OF KISSING.—We have heard of a Judas' kiss long years ago, and formed a great contempt for persons whom, we understood, imparted such; but, assuredly, the vilest kissing that can possibly be imagined is that that inflicts syphilis upon the party kissed. A young man who would poison his lady love or his sister with a vile disease, like pox, by a kiss, is certainly not fit to live. When such occurrences happen, we think it is about time that society should give some attention to young men, who claim to be respectable, but are, in fact, but moral lepers, and with whom it is dangerous to associate or have any intimacy. Not very many years ago, in country villages, and even larger towns, it was not regarded immodest for a young lady to be

kissed by a gentleman. Impurity, at that time, at least, was not in a young woman's thoughts, and consequently she thought there was nothing wrong in permitting some familiarity with a gentleman with whom she was acquainted. But in these fast times when *respectable* young men regard it as a very ordinary affair to contract a venereal disease, any familiarity would be attended with the greatest danger.

We clip the following from an exchange:

"Dr. R. Stanbury Sutton, in the *Journal of the American Medical Association* (June 5), reports two cases of undoubted syphilitic disease contracted by kissing.

"A young man presented himself at the doctor's office with a full-blown chancre on his penis, and a syphilitic sore mouth. Some weeks later he received a letter from him, saying that his chancre was healed; but, a few days after consulting him, he had kissed a young lady at an evening party, and that she had syphilitic sore mouth as a result.

"Recently the doctor was consulted by a young married woman, who presented a squamous eruption, syphilitic sore mouth, and condylomata. Her husband was free from syphilitic taint. Upon investigating the origin of the disease, it was discovered that the lady's brother, who had long been absent, had returned home with syphilis, kissed his sister and infected her."

---

DISCOVERY OF MICROCOBES IN DENGUE AND OTHER DISEASES:—Dr. McLaughlin, of Austin, Texas, claims to have discovered the microcobes in dengue fever, and believes that they can be found in smallpox, yellow fever, hydrophobia, hog typhus, chicken cholera and Texas cattle fever, all of which, he thinks, can be mitigated or avoided by vaccinating with attenuated virus. The following are the experiments by which the results were reached, as we find them detailed in the *N. Y. Medical Journal*:

"Blood was obtained from subjects during the various stages of dengue and microscopically examined: 1. Without the addition of chemical reagents; 2. After being submitted to the chemical agents—that is, acetic acid and a ten per cent. solution of caustic potash; 3. The blood was carefully dried upon sterilized covered glasses by passing them through the flame of a spirit lamp, and then to the action of various staining reagents; 4. Dengue blood, obtained from living subjects, was introduced upon the point of platinum wire into the test tubes containing sterilized culture



jelly prepared for the purpose. The tubes were closed with plugs of sterilized cotton, kept at a temperature of 100 degrees for the growth of such organisms as the blood contained; 5. Blood was drawn from the vein of a living subject into a series of sterilized glass tubes united by a capillary tube, so that it was impossible for germs from the air, or by other accidental means, to enter those tubes; 6. Matter vomited and urine passed by the subject were subjected to microscopical examination. The following results were obtained: In the blood examined directly or after its treatment with the chemical named, stained or unstained, the doctor invariably found, often in great numbers, in the cell elements as well as in the blood plasms micrococci about one or one-thirtieth the diameter of the red cells, spherical in shape and of a red and pinkish color. These, when seen in great numbers superimposed upon each other, appeared of a brown or blackish color, but seen singly, or in their layers in the culture or in the blood, the color was always distinct in characteristics. Dr. McLaughlin will present his discovery to the American Medical Association, to which end he left for the North."

---

A NEW HYPNOTIC.—A new hypnotic has been discovered which has been given the name of URETHRAN. It is said to be chemically an ethylic ether of carbonic acid. When pure it appears as white rhomboidal crystals, which are readily soluble in water. It produces a deep, dreamless, natural sleep, from which the individual awakens refreshed, without the unpleasant sensations which so often attend upon opium. It does not appear to have any special action on the circulatory, respiratory, or excretory system. Its effects seem to be exclusively upon the higher cerebral centers.

It acts well in cases of heart disease, phthisis, neuralgia, etc. In phthisis it seems to allay the cough. It is not unpleasant to take; the dose being, as a sedative, from 15 to 30 grains, as a hypnotic from 30 to 60 grains.

---

GRANULATED EYELIDS.—We see it stated in an exchange that the specific tincture of hydrastis, full strength, applied to granulated eyelids, one drop to each eyelid, night and morning, by means of an ordinary dropper, has brought about a cure after all other methods of treatment had failed.

# THE CINCINNATI MEDICAL NEWS.

VOL. XIX. No. 223.  
Old Series.

JULY, 1886.

VOL. XV. No. 7.  
New Series.

## Original Contributions.

### Report of Two Autopsies Where There Was Intestinal Obstruction, with Remarks.

BY S. T. EARLE, M. D.,

Prof. of Rectal Surgery in the Baltimore Polyclinic and Post-Graduate  
Medical School, etc.

Read before the Clinical Society of Maryland.

THE two following cases of intestinal obstruction seem to me of sufficient importance to bring before this Society.

CASE I.—M. M., colored, insane, female, age 69 years, an inmate of Bay View Asylum. For a week before her death the patient had complained of severe colicky pains in the abdomen, which became very much distended. Death took place rather unexpectedly October 29, 1884. Autopsy was made October 30th. The body was small, slightly built, emaciated, and the abdomen was very much distended. On opening the abdominal cavity the intestines were found much distended, and of a dark red color. This was particularly the case with the ileum. On endeavoring to lift up the intestines they were found to be fixed in the pelvis, and owing to the great distension it could not be seen what the trouble was. The entire abdominal viscera with the uterus and vagina were removed from the body, and then it was found that the entire ileum from six inches above the valve had passed through a narrow opening that existed in a band of fibrous tissue, passing from the left corner of the uterus to the broad ligament. In addition to this constricting band

others were found, all being most probably due to an old pelvic peritonitis. The constricted portion of the intestine was very much distended, and filled with bloody fluid. Some blood was also found in the peritoneal cavity, and the entire membrane was diffusely stained. A closer examination of the bowel showed that the entire mass twisted once upon its own axis, thus effectually shutting off all circulation in the mesenteric veins. There was no adhesion of the bowel or mesentery to the constricting fibrous band. There was a well-marked prolapse of the vagina and uterus, the cervix uteri lying outside of the vaginal canal. The uterus was five inches long, very narrow, and its canal in places obliterated. The left corner, at which point the constricting band was attached, was very much elevated, and the opposite corner shrunk. In the right broad ligament was a cyst with smooth walls, lined with ciliated epithelium. This cyst was as large as a lemon. This mode of intestinal obstruction by the bowel passing through an opening made by a band of fibrous tissues, is by no means uncommon. Abundant opportunity for the formation of such bands is given in the frequency of pelvic peritonitis, typhitis, and other forms of chronic peritonitis.\* Mr. Hutchinson mentions a case where the slit was formed by a false ligament being placed parallel with and close to the broad ligament of the uterus. It may also take place by passing through rings or slits formed by loops of the intestine that have become matted together.

Dr. Quain describes an autopsy where forty inches of the ileum were found to have passed through a slit in the broad ligament. In this instance, however, the gut was also held down by a band of old adhesion. Barth reports a case of strangulation of the intestine through a slit in the suspensory ligament of the liver. Mr. Holmes has placed on record a remarkable case where a loop of the lower ileum was strangulated through a hole formed apparently in an appendix epiploica. The appendix in question was attached to the sigmoid flexure, and formed a fatty, fibrous ring through which the loop had passed. There were several large and broad appendices upon the same segment of the colon, some of which were perforated near their base, as if they also were capable of developing into rings. It may be that the

---

\*All of these cases referred to were taken from Treves on Intestinal Obstruction.

appearance of the ring had been brought about by two adjacent appendices becoming adherent at their extremities. A peculiar mode of strangulation is by slits, or apertures in the omentum, which may be due either to congenital malformation, or, as is more usual, the result of injury. Also through the same occurring in the mesentery; these latter are most common in the mesentery of the lower ileum, are rare elsewhere, and they too can frequently be traced to injury. Several specimens in the museums of London show that the limited rent in the mesentery was the only visible lesion following violence to the abdomen. Mr. Partridge has reported a case, which is probably unique, of strangulation of a knuckle of ileum through an aperture in the mesentery of the vermiform appendix. Symptoms in these cases are those of acute intestinal obstruction. In their treatment nothing short of laparotomy will afford a reasonably hope of permanent relief, and the sooner performed the better, after the diagnosis has been made.

CASE II.—J. D., white, male, age 45 years. On Thanksgiving Day, two days before death, he had eaten very heartily of various substances provided for this feast day. The next day he complained of great pain in the abdomen, and in the evening was suddenly seized with collapse, from which he never rallied. Post-mortem made December 1, 1884. Body large, strongly built, abdomen distended. Examination of the brain, cord and thoracic viscera revealed nothing of any importance. Both lungs, however, were oedematous. On opening the abdominal cavity there was an escape of gas. Intestines dark and slightly agglutinated. A quantity of pus and yellow flocculent matter was found free in the abdomen. In the median line and reaching from the ensiform cartilage to the pubis was a dark distended viscus as large as the arm of a stout man. On further examination this viscus was found to be the cæcum and part of the ascending colon, which had become bent upon itself and turned up so that the caput lay almost touching the stomach, and was completely constricted by the sharp bend it was compelled to make. The small intestine lay beneath it and was greatly distended with gas. The ascending colon was constricted from the same cause. Perforation had taken place in the enormously distended cæcum in three places, and the gut was as thin as paper, and showed evidences of a chronic distension. On opening it a large amount of undigested food was found, raisins, currants, etc.,



and two large pieces of tendon, one being half as large as the palm of the hand. The man had an abnormally long meso-cæcum, and most probably from distension with gas and undigested food, it had acquired a slight torsion, and as distension continued from the fermentation that was continually going on, the constriction, both of the small intestine and colon, was made more and more complete.

This case presents a form of volvulus that is very rare. There are two in which it may be produced, either by the cæcum being twisted upon itself, or being bent upon itself. In the former instance the cæcum is twisted around on its long or vertical axis, so that its relation to the ascending colon is practically unchanged. In the latter class of cases the cæcum is bent upon itself at right angles to its long axis, which inverts the cæcum, bringing the caput coli in front of the ascending colon and the posterior surface anteriorly. This last variety of cases is represented by the case just reported, except that the caput coli occupied the left hypochondriac region. There have been three of the former variety reported by Dr. Fagge in Guy's Hospital Reports, Vol. XIV., and two of the latter, one each by Dr. Fagge, reported in the same number of Guy's Hospital Reports; and Dr. Hanfield Jones, in the *Med. Times and Gazette*, Vol I, p. 3, 1872. In the five cases just alluded to, as in the one just reported, there was an abnormally long meso-cæcum, which may fairly be regarded as necessary to the production of this volvulus. Of the mechanism involved in the production of these cases generally little is definitely known, although many speculations have been indulged in. We think, however, the explanation given of the productions of the case just reported a very fair inference. Since the occurrence of this case at Bay View, the meso-cæcum of all cases autopsied has been examined, and in but one instance has been found of sufficient length to enable the cæcum to assume such a position. The symptoms of volvulus of the cæcum, as will be seen by reference to the five cases just alluded to, which include examples of an acute, subacute and chronic case. Distention of the abdomen, generally of an irregular character, was constant, and in every case the cæcum was enormously distended. In the treatment of these cases, as in those of obstruction by bands, laparotomy offers the only rational hope for permanent relief.

## The Clinical Society of Maryland.

*Stated Meeting Held June 4, 1886.*

DR. GEO. THOMAS and Dr. N. T. Carswell were elected to membership in the Society.

Dr. Samuel T. Earle then read

### A REPORT OF TWO AUTOPSIES WHERE THERE WAS INTESTINAL OBSTRUCTION.

Dr. John Chambers thought Dr. Earle had made a valuable point in calling attention to the variation in the length of the mesentery in different persons. He thinks volvulus or hernia is rarely or never seen in persons with short mesenteries; at any rate he has always failed to produce a hernia in the dead subject where a short mesentery existed, while in the opposite condition of affairs his efforts were successful.

Dr. Randolph Winslow thinks a right colotomy would have been a better suggestion than laparotomy, in Dr. Earle's second case.

Dr. Samuel T. Earle, in closing the discussion, said the reason for the gut not collapsing when perforation occurred, was that it took place at a point where the gut was pressing closely against the abdominal wall, and this interfered, of course, with any escape of the contained gas.

### CANCER OF THE STOMACH.

Dr. John Chambers showed a specimen of cancer of the stomach from a man *æt.* 65 years. For about a year he had suffered only from the ordinary symptoms, but lately he was troubled with most intense nausea and vomiting. Four months ago Dr. Coskey diagnosed cancer of the stomach, and his opinion was verified at autopsy.

There were metastases in the liver, but no disease immediately about its porta. There was no dropsy. The peritoneal cavity, especially its pelvic portion, was studded with carcinomatous nodules. The growth involved the central area of the stomach slightly nearer the pyloric than the cardiac extremity. It gave to the organ an hour-glass shape.

He also showed the head and about four inches of the shaft of the femur that he had resected from a boy *æt.* nine years. The patient had suffered from a suppurating arthritis

for two years. The portion of the shaft presented was removed without difficulty, as it lay loose in the periosteum.

#### OBSTRUCTION OF THE TRANSVERSE COLON?

Dr. R. G. Hall asks the opinion of the Society upon the following case:

A man in whose left hypochondriac region there is a smooth resonant tumor, not painful upon pressure. The man has no fever, and complains only of a burning sensation at the seat of the enlargement. This burning is relieved by vomiting. He is constipated and has a passage from his bowels only when purgatives are employed. One week since he became very much collapsed, but rallied and is now much improved.

Dr. J. Edwin Michael said under the circumstances any opinion that might be advanced could be nothing more than a guess. But he would venture as a guess that there is an obstruction in the transverse colon on left side, and that the swelling is the result of the bowel distention, and brought about by this obstruction.

Dr. Samuel T. Earle said the evacuation from the bowels in these cases should always be examined, as they often shed much light upon the existing condition. He referred to a case of unsuspected cancer of the rectum that he had recently diagnosed by the contents of the gut; the seat of disease being too far up to be reached by the finger.

Dr. J. H. Branham referred to a case of fæcal impaction that had been mistaken for constriction.

#### NÆVUS OF THE TONGUE.

Dr. J. Edwin Michael was recently called upon to remove a nævus from the anterior extremity of the tongue of a young lady. He employed the plan of cutting off the blood supply by a double silver wire ligature placed at its proximal side. On the second or third day it looked as if it was about to slough, but on the sixth day there appeared a rozy zone of healthy-looking tongue tissue around the sloughy-looking nævus; closer examination revealed the fact that the wire had cut through the tissue of the tongue at its outer edge, and the portions thus incised had united and circulation was established. From present appearances the nævus will slough out, leaving a ring of healthy tongue tissue.

Dr. G. H. Rohé suggests electrolysis in these cases.

## LAPAROTOMY PERFORMED UNDER COCAINE.

Dr. L. McLane Tiffany said he was recently called upon to do an abdominal section, and it occurred to him to use cocaine as a local anæsthetic. He cut off the circulation from the line proposed for the incision by pressing upon the abdomen a wire pessary covered with rubber and bent in the shape of a long, narrow rectangle, which would inclose the line in which he proposed to cut. After the circulation was arrested he injected along the line about 3ss of a four per cent. solution of cocaine. The incision when made was painless until it was extended beyond the line of injection of the salt, when the patient complained of pain.

His second case, in which he employed it, was in an amputation of the penis for epithelioma of the glans. The circulation was arrested by constricting the organ at its proximal end. A four per cent. solution was then injected, and the operation completed without pain, except when one vessel was being tied, when some discomfort was complained of.

Dr. J. Edwin Michael has used cocaine with most happy results in the smaller surgical operations, and especially in the lesser genito-urinary operations. One of the most effectual fields for action is in the arrest of hæmorrhage from mucous surfaces, and especially when occurring in the nasal cavity. He related several cases of extreme hæmorrhage from the nose that had been instantly checked by the application of pledgets of cotton soaked in a four per cent. solution of the drug.

The Society then adjourned to meet the first Friday evening of October, 1886.

---

 Essential Vertigo.
 

---

A paper read by Dr. L. Bremer, of St. Louis, before the American Medical Association.

---

IMPAIRMENT of equilibrium accompanied by strange sensations of varying kinds and degrees, he said, is met with as a symptom not only of cerebral, but of a great many other diseases, especially those of an exhausting and debilitating character. Besides the physiological vertigo produced by rapid rotatory movements, or by a sojourn in high altitudes,



temporary pathological giddiness or dizziness is not uncommon with many persons enjoying in other respects good health. In fact, there is scarcely an adult who has not at one or other period of his life experienced vertigo of some kind.

Whereas, then, vertiginous sensations may be said to fall within the boundary lines of health, they may constitute a well-marked disease and rise to the dignity of a pathological entity, if they are severe or persistent enough to interfere with the comfort or the occupation of the individual so affected. The moral effect of the same degree of vertigo varies much with the individual moral and mental disposition of the patient: an attack of vertigo of a certain intensity that will appear of the gravest importance to one, will by another be ignored, thought nothing of, and easily forgotten. Thus, the psychical and consequently physical effect of such an attack will tell more on the excitable than the phlegmatic. Children seem less disposed to the trouble than adults, or perhaps less likely to speak about it than adults, who have an idea, however vague, of its seriousness.

The English expressions, giddiness, dizziness, light-headedness, all of which are comprised in the term vertigo, signify a number of totally different affections; they are often used promiscuously by physicians and patients, and may mean loss of balancing power, simple fullness or pressure in the head, faintish feelings, temporary confusion of thought, or bewilderment and strange and indefinable sensations in the head in general.

The kind of vertigo which is the subject of the present paper shows a tolerably well-defined and circumscribed clinical picture. The term "essential vertigo" was chosen as suggested by Nothnagel. It is the form which by others has been described as "idiopathic" or "simple" vertigo.

This affection must, in the present state of our knowledge, be classed with the neuroses, excluding those cases that are due to disturbances of vision, hearing, or digestion, to the gouty diathesis, epilepsy, malaria, cardiac trouble, acute infections, and organic diseases of the brain, intracranial tumors, atheromatous condition of the cerebral arteries, in short, all the so-called organic—*i. e.*, coarse pathological lesions of the central nervous system.

Although there are many variations of the disease, and, since the symptoms are chiefly subjective in character, ever changing according to the individuality of the patient, the

essayist gave with much minuteness an average representation of the symptoms of essential vertigo.

The patient is generally, though not always, more or less anæmic looking, debilitated, and exhausted by overwork, excesses, etc., and experiences a strange sensation in the head, a feeling of emptiness accompanied by a loss of balancing power.

Prominent symptoms are those included in the various phobias. Essential vertigo is an affection preëminently attended by hallucinations, other psychical symptoms taking prominent part.

Essential vertigo must be distinguished from vertigo due to aural, ocular, or stomachal disturbances. This distinction is rendered all the more important on account of frequency with which complications of sight, hearing and digestion accompany essential vertigo.

Neither physiology or pathology has done much to enlighten us in regard to the seat of the disease; we can not as yet speak of an equilibrial centre. In man the equilibrium is maintained by a complex nervous organism, composed of a number of afferent and efferent nerves and their central and peripheral terminations. The chief motor centre is the medulla oblongata. • There can be no doubt that this, in connection with the subsidiary and local vasomotor centres, are particularly unstable in individuals who are in a state of exhaustion or neurasthenia.

The cerebellum is not, according to recent investigation, the exclusive coördinating or equilibrial centre, but it is one of reinforcement of the motor impulses, as they are transmissible from the psychomotor area to the voluntary muscles. Essential vertigo is generally brought on by a vascular constriction in those arteries which supply the middle portion of the brain—the recognized seat of the centre of equilibration. But this vaso-constriction is chronic, and with it a more or less permanent irritability and instability of the equilibrial ganglionic cells is brought about. In advanced and confirmed cases the highest sensory impressions suffice to bring on the vertigo without the vascular disturbance. The remote cause of essential vertigo is a neurotic disposition. The proximate causes are exhausting diseases, excesses of all kinds, the rays of the sun, overheated and badly ventilated rooms, indigestion, mental maladies, and, in great many sections of the country, malaria. The last-named disease constitutes a fertile soil for the development

and growth of all kinds of neuroses. Even after the malaria has been cured the malaria caused by it may persist. The seasons also play an important part in the production of vertigo. Moderately cold winter months, May and June, are the most favorable for the patient. The heat of the summer months has a prejudicial influence on them.

Treatment. The therapeutic measures must be reconstructive in character. The food and clothing must be carefully regulated. Only woolen garments should be worn. There is scarcely a case of vertigo without gastric disturbance, usually in the form of a nervous dyspepsia. Yet such a case can not be called a *stomacho læso*, although the stomach, above all, has to be treated. Cold water is a useful and potent remedy. Hot and warm bathing have proved injurious. The bromides and quinia usually prove beneficial; iron generally aggravates the difficulty, although, judging *a priori*, it is indicated.

Owing to the anæmia that is almost universally present, arsenic is frequently useful. Amyl nitrite and ergot seem to exert no influence on either anæmic or hyperæmic vertigo. Electro-therapeutic measures in the hands of the essayist had failed completely.

Prognosis. As regards the duration of life, the prognosis is good, but a cure is not always to be anticipated. An individual suffering from essential vertigo may grow old without apparent effect being exerted upon the powers of life, but the constant alarm that is experienced is almost certain to develop physical and psychical disturbances of more or less severity. Loss of memory and confusion of thought are ominous symptoms. It would be a comparatively easy task to combat vertigo successfully were it not for the fact that we have in most instances to deal with individuals addicted to alcohol and tobacco, whose surroundings are unwholesome, and whose financial circumstances are adverse. However complete the success of treatment in a case may seem, there always remains a tendency to relapse. Like the sword of Damocles, vertigo hovers over the head of the predisposed, ready to descend upon the victim when least expected.

---

A CORRESPONDENT of the *New York Medical Record* says that in Germany the operation for gastrotomy is so common that few care to witness even Billroth's operations for gastrotomy.



## Selections.

### New York Academy of Medicine.

*Stated Meeting, May 20, 1886.*

THE PRESIDENT, A. JACOBI, M. D., IN THE CHAIR.

DR. JANEWAY read a paper on

#### THE DIAGNOSIS OF DISEASES OF THE HEART.

He said he did not, by any means, propose to go over the whole ground of cardiac diseases as taught in the textbook, but merely to touch upon certain points involved in more or less obscurity, and some in regard to which there are differences of opinion. He first spoke of alterations in the position of the heart, and dwelt particularly upon the lowering of the heart and the apex-beat resulting from abnormalities in the thoracic aorta; a circumstance to be borne in mind by all those who had to deal with cardiac affections. Again, the heart might be pushed upward and forward in cases of spinal curvature and of enlarged spleen; and when this is the case, it is necessary to be on one's guard lest the condition be mistaken for aneurism of the aorta.

Among the other points treated of were the following: In men the nipple is frequently referred to in the books as a guide for the position of the heart; but on account of the varying location of the nipple in different individuals, this is unreliable, and the center of the sternum is a much more desirable point of reference.

The cardiac impulse is a matter of considerable interest, and it is not infrequently the case, that in those who have been resting for some time in a recumbent position there is no visible impulse; while sometimes none can be discovered even on palpation. Yet such a condition of affairs may be perfectly consistent with a normal heart, and indicate nothing more than a slight lack of cardiac force.

Thrill, as produced by the heart, is of no absolute and invariable significance, and is met with in various conditions. The thrill accompanying mitral stenosis, however, which is presystolic in time, is of considerable diagnostic value.

In speaking of auscultation of the heart, he remarked that one is apt to consider the heart more or less in a dan-



gerous condition if a murmur is present, but that it is normal if no murmur can be detected. But it is always highly important to pay attention to the heart sounds. In anæmia, all admit that a murmur may appear at the base, and even at the apex. At times a soft murmur can be heard at the second interspace, with normal closure of the valves. Sometimes this is due to anæmia, but not always. If anæmia is not present, the cause is to be looked for in the reduction of the caliber of the pulmonary artery from some pressure upon the vessel. Some murmurs vary with the respiration, and the possible occurrence of a cardiac respiratory murmur is not to be lost sight of. In certain individuals short diaphragmatic contractions are produced when they are told to hold their breath. In order to determine the true character of a murmur, it is necessary that all the circumstances attending it shall be taken into consideration, and in many instances a number of examinations, extending over a considerable period of time, are required for this purpose.

Murmurs are sometimes liable to be mistaken for each other, as, for instance, a mitral presystolic for an aortic regurgitant. In mitral stenosis there are also great divergencies as regards the character of the murmur, and it is possible for this condition to exist without any murmur at all, or with a murmur which is intermittently present. In general, it may be said that the loudness or softness of a cardiac murmur is no index of the gravity or insignificance of the diseased condition present.

In speaking of the subject of embolism, Dr. Janeway said that a thrombosis may occupy such a position as to be out of the way of the blood-current, and thus give rise to no murmur whatever. In illustration, he related the case of a young woman, twenty-one years of age, in the syphilitic wards of Charity Hospital, Blackwell's Island, who, while engaged in combing her hair one day, became suddenly affected with hemiplegia, although she did not lose consciousness. A careful examination revealed nothing in the slightest degree abnormal about the heart.

Pulsation of the liver may cause difficulty in making a diagnosis between aneurism of the aorta and disease of the heart. The liver may rise and fall simply as the result of pressure from an enlarged heart, or it may have a true expansile pulsation itself.

Finally, he said, syphilis is a frequent cause of valvular disease of the heart, and a careful examination of the sub-

ject would show that it is responsible for many of the cases which are generally supposed to be of idiopathic origin.

Dr. E. Darwin Hudson, Jr., said that the various points touched upon by Dr. Janeway in his paper, were of special value as coming from one who had had opportunities enjoyed by scarcely any one else in this or any other country, for following out cases observed during life, to the autopsy room. He had nothing to criticise in the remarks that had been made, and would simply refer to a few points which had occurred to him in connection with them.

The study of the location of the apex is a matter of very considerable importance. This can ordinarily be determined by palpation; but if this is not sufficient, auscultation can be resorted to for this purpose. The location of the apex is of no little diagnostic value. For instance, if the apex is in its normal position, it is practically impossible that there could be either hypertrophy or atrophy of the heart; and hence any alteration in the size of the organ may be excluded. If the heart were shifted out of its normal position, murmurs at the base and apex might have an entirely different significance from what they would have under ordinary circumstances.

In the study of mitral murmurs, it is highly important to consider the composite nature of the first sound of the heart, as so well described by Walshe. In a large number of cases he had found that murmurs which had all the characteristics of mitral regurgitation of mitral stenosis were not permanent. Although he was perfectly satisfied as to the occasional existence of the mitral presystolic murmur, he did not hesitate to say that he was somewhat skeptical in regard to its frequency. There are a great many murmurs which stimulate the true mitral systolic murmur; and time, rest, and the use of cardiac sedatives are not infrequently required to enable one to determine with accuracy the condition present in any given case. At the present time he had under observation a boy who had a cardiac murmur which is most distinctly heard at the apex, and can also be heard behind, but it is not transmitted around the walls of the chest. Hence this sign, which is often spoken of in the books, is fallacious.

Dr. Heineman said that it is an important distinction for those engaged in the study of diseases of the heart to remember that it is not the apex-beat alone, nor the size of the heart alone, and not the murmur that might be pres-

ent alone, but all these combined, together with the examination of the pulsations in the neck, and the clinical history of the case, which must be taken into consideration in making a diagnosis. Before arriving at a definite conclusion in obscure cases, we would help ourselves by going over the entire case, with the clinical history.

As to the matter of thrill, he had studied this sign carefully for a number of years in the patients met with at Prof. Alonzo Clarke's clinic, and he had found that there may be a very loud and intense murmur, and yet no thrill. There is, therefore, no relation between the presence of thrill and the intensity of the murmur. As regards time, the presystolic thrill is not always to be relied upon. It is only one element in the diagnosis, and one that is uncertain.

If three or more murmurs are present in a case, it is impossible to say, upon a single examination, what the exact condition is at the aortic and mitral orifices. This can only be determined by repeated examinations.

Dr. Alfred L. Loomis remarked that Dr. Janeway had called attention to some very difficult questions. In the first place, he had spoken of displacements of the normal heart as a result of changes in the aorta. At one time he had had occasion to examine the hearts of a large number of healthy persons, and his experience thus acquired had shown him that the variations as regards the position of the apex-beat are much greater than the books would lead us to believe. Downward displacement of the heart was the one which struck him as the most common, and the most likely to occur—that is, displacement without disease. If the apex is below the normal limit, while the heart is normal in other respects, it will not have any special pathological significance.

As regards the force of the apex-beat, there could be no doubt that, as Dr. Janeway has said, a decided setting back of the origin is liable to occur as a result of the horizontal position. In many healthy individuals it is impossible to make anything out by means of palpation, with the patient in the ordinary position. In order to facilitate this, he should be asked to lean forward, but even this sometimes fails in eliciting the desired information. Long confinement in bed, he thought, interfered with the nutrition of the cardiac walls. In heart-troubles, it is not the murmur and the changes of position which are of so much conse-



quence, as the integrity of the walls of the heart and of the rhythm.

The more he studied the heart, the more convinced did he become that cardiac murmurs are not of as much significance as it is apt to be supposed. But when, with the murmur, there are evidences of changes in the walls of the heart, as well as changes in the rhythm, these give us more information than the force and character of the murmur. Thrill, he said, is generally present in presystolic mitral obstruction murmurs; but this is not the only thrill. In dilatation of the right heart there may be thrill as well as murmur.

The diagnosis between presystolic and aortic regurgitant murmurs is an old question. Many years ago he had seen an autopsy in a case in which the latter murmur was believed to be the one present during life; and it was found that there was stenosis of the mitral orifice. Since then, he said, there had never been to him any question about the presystolic murmur and the conditions which give rise to it. It is not of serious import unless the result of endocarditis. The two murmurs are, in fact, however, so different that there need be little difficulty about the diagnosis at the present day.

In order to have hepatic expansive pulsation it is necessary, in his experience, to have very free tricuspid regurgitation.

Dr. Loomis then went on to say that the medical mind ought to be freed from the trammels of these murmurs. It is the dilatation of cavities that caused the trouble; but if there is perfect compensation, there will be no difficulty. Sometimes the dilatation of the heart-cavities is quite sudden, as in one case referred to by Dr. Janeway, in which this sudden dilatation was the direct result of unusual physical exercise. In conclusion, he said that he had not understood whether Dr. Janeway considered ulcerative endocarditis a primary or a secondary affection; and there is considerable diversity of opinion as regards this point.

Dr. Janeway replied that he had seen two cases recently in which there was cystitis, with septic organisms, and the ulcerative endocarditis present was clearly secondary. He had also seen many other similar instances, and one was a case of pyæmic pneumonia, in which the presence of the pneumococcus of Friedländer was satisfactorily demonstrated. But there are undoubtedly other cases in which the ulcerative endocarditis is a primary process. Here nothing has preceded the endocarditis, and yet numerous



vegetations are found associated with abundant micro-organisms. The most careful investigation failed to show that these patients had been exposed to typhus or other form of infectious disease, and they were not followed by cases of such disease in other individuals. It was, therefore, highly probable that the ulcerative endocarditis was primary. Then again, there is a third class of cases in which it is impossible to say whether the endocarditis is primary or secondary, and in illustration he mentioned the case of a boy suffering from osteomyelitis, as well as endocarditis, which was of this character.

---

### The Question of Medical Advertising.

---

IN order to succeed in the practice of his profession a young physician, or an old one, must not only possess a knowledge of his science and the ability to apply it, but must also make himself known to others, or, as it is usually called, must advertise himself. Great erudition and skill are practically of little value unless they can be made use of to the profit of the possessor, or of his fellows. Doctors must have patients, and the problem which all must solve is how to secure patients in order to turn the capital of knowledge into a means of support.

We have received a communication from a valued Iowa correspondent, "E. H. H.," in which the writer advocates newspaper advertising as the surest, most honorable, and best method of securing a profitable clientele. He says:

"Considering the change in the mode of doing business in all trades and professions, there is a possibility that there is some consistency in a demand for some change in ours as well. Specialization in medicine, improved traveling facilities, and the demand on the part of the public for proficiency in all branches of knowledge, change to so great a degree the situation, that a new definition of what constitutes dignity in advertisements seems loudly called for. Advertisement—that word which causes such a bellicose flush to mount into the face of the orthodox—is a word which describes the motive of much of the conduct of a great majority of our brethren in the profession. They must know that to it they owe three-fourths of their success. We must advertise, that is certain. Many are the ways that the

physician has to resort to, aside from his 'unintentional' notices in the paper. He spends much of his time at the public resorts—at the corner grocery, at the lodge, church, or saloon—the grade depends upon the social class among which he expects to get his practice, or the town in which he has cast his lot. A higher grade of the methods in advertising is lecturing before schools, exhorting in churches, officiating in lodges, publishing advice, and heading new movements. The founding of the numerous medical colleges figures largely under this head, and may be considered the best of all. If the young physician can not do these things with sufficient suavity and polish, he will certainly starve on the threshold of his career, or be driven from it to some employment under salary, or to some business that affords an opportunity to make some use of the usual ways of becoming known.

"Is there not, in the relations of the profession of medicine to the public, a necessity which is repugnant and nauseating to a really modest man? Would it not be more dignified to be allowed to announce himself by the methods of a first-class business, under the restrictions above cited, and governed in it by his tastes, announcing his business, his place, his facilities, so far as his appliances are concerned, for doing that business? If he has a hospital, let him announce it, leaving out all mention of personal qualifications, advantages had, or relations sustained heretofore, these are the elements that are out of taste and undignified, and the part that should be discountenanced.

"Unwholesome laws which prevent the growth of giants in a profession or trade, but which trim all alike, as a hedge fence, on the ground of fairness toward their neighbors in the same business, dwarf the whole system, and bear fruit below the standard of which the human mind is capable, and prevent a healthy action of that law which determines the fittest man for the work. Every facility consistent with right and true dignity and adaptation to the age should be allowed for development. Life is short, and there is no reason why half of it should be wasted waiting for a living practice only, or that half of it should be given to illegitimate work to make one's self known.

"These arguments, it is true, do not so much apply to the family doctor, or to the attendant on acute diseases and routine practice, as to the practitioner in chronic diseases, who finds himself in circumstances very different.

People now are not satisfied with the final judgment of the man who has a general knowledge of the whole round of medical and surgical practice, but seek for the specialist, however distant, to look into their cases, before they are willing to rest their chances for weal or woe. It is easy to learn where to invest money, to get an education, and the safest route to take on a journey; but the same source from which people obtain this information directs them to the lowest level of the representatives of our profession, where they are swindled and get the least skill in the art."

We agree with our correspondent that there is much that is reprehensible in the methods too commonly employed by many physicians to make themselves known and to keep themselves prominently before the public; but we doubt whether the substitute which he proposes would be a desirable one in any sense. A simple and modest advertisement in the public journals would be no guarantee of the advertiser's ability or skill. If all should advertise no one would more conspicuous than his fellows, and the least conscientious and honorable would be the very ones who would have the most conspicuous and alluring display. The writer applies his remarks more particularly to the specialists; but, whatever may be urged in favor of the general practitioner presenting his claims for patronage in this manner, we can not admit that the specialist would be justified in so doing. The part of the specialist in medical economy is to assist the general practitioner in cases in which more than the ordinary knowledge and skill is required. It is to the medical profession, and not to the public at large, that the specialist should look for his practice. The family physician has the physical well-being of his patient committed to his trust, and is responsible for its preservation. If he enjoys the confidence of his patient he will naturally be consulted in the selection of a specialist, when necessity may arise, and will recommend the patient to the man whom he considers the most capable and skillful. And surely he would not be influenced in his choice by a well-displayed newspaper advertisement.

We see no objection to a specialist, if he so desire, printing a simple card in the medical journals, but there is another and better way. Let him not only assert his ability to treat certain diseases, but let him prove that he possesses the requisite knowledge by well-written articles. The columns of the medical press are open to all who have anything to

say, and who can say it in a way to interest their professional brethren. If a man can show his fellows that he is an expert in his particular field, he will not have to wait long for patients, and he will receive them on the advice and with the good will of the family physician. But let him seek, through advertisements in the public press, to draw to himself patients, against the will of their medical advisers, and he is close to the borderland of charlatanism. Honest professional work is what pays best in the long run.—*Ed. in Med. Record.*

---

### Herpes Facialis Affecting the Eye.

---

AT a recent meeting of the Ophthalmological Society of the United Kingdom (*British Medical Journal*, April 17, 1886), Mr. W. H. Jessop read a paper based on four cases of herpes facialis affecting the eye. In the first case the herpes followed the track of the external division of the supra-orbital nerve; the eye was affected with iritis, keratitis punctata, and increased tension; recovery, with perfect vision, occurred quickly. In the second, herpes along the lachrymal division of the ophthalmic nerve was followed by keratitis punctata and interstitialis. In the third case there were herpes along the frontal and lachrymal divisions of the ophthalmic nerve, early anæsthesia of the cornea, and superficial keratitis. In the fourth case the herpes followed the course of the infra-orbital nerve, and there were phlyctenular ulcers on the cornea. It was pointed out that herpes facialis followed the distribution of the fifth nerve, and that, when the eye was involved, the branch affected was usually the ophthalmic, but sometimes the superior maxillary. The most usual distribution was along the frontal, but there was no recorded instance of the nasal being the only branch affected, nor of the nasal and lachrymal branches being simultaneously attacked, while the frontal escaped. The fourth case was, he believed, the only recorded instance of the cornea being affected in herpes infra-orbitalis. Mr. Hutchinson had pointed out that the eye was affected if the oculo-nasal branch were attacked. The most common ocular complications were swelling of the lids, conjunctivitis, and increased lachrymation; the cornea might become affected by superficial ulceration, phlyctenulæ, interstitial keratitis, or keratitis punctata; and neuro-para-



lytic keratitis had been recorded. Serous or plastic iritis might occur; and the pupil, though generally contracted, had been found sometimes dilated. The chief affection of the fundus was papillitis. The tension was said to be generally lowered. Palsy of the extrinsic muscles and paresis of accommodation had been recorded. After referring to the *post-mortem* evidence of neuritis and dilatation of the ophthalmic artery, Mr. Jessop expressed the opinion that all the ocular symptoms, with the exception of the rarest, might be explained by supposing a dilatation of the vessels due to irritation of the sensory nerve. Vascular dilatation lasting some time would especially influence such a structure as the eye. If the whole attack was due to the neurotic storm, the different nerves would be affected nearly simultaneously, and the ocular symptoms would be coincident with the cutaneous eruption, which was not the case. Mr. Jessop attributed to Hutchinson the credit of first separating herpes accompanying the ophthalmic division of the fifth nerve from erysipelas.

---

### Lactic Acid as a Destroyer of Pathogenic Tissues.

---

SINCE Mosetig-Moorhof's favorable results with this agent (*Centbl. f. Chirg.*, 1885, No. 12) various other observers have made use of it, in lupus, superficial epithelioma, papillomatous growths, fungous processes, scrofulous ulcerations, laryngeal phthisis, etc. Its advocates claim that it is not true caustic, but selects deceased and spares healthy tissues. Wherever its application is practicable, it is consequently to be preferred to curetting.

The acid is a syrupy liquid miscible with water. Though not considered necessary by some, its action may be confined by covering surrounding parts with plasters, collodion or traumaticini; fats are an impediment. It is applied on linen, felt, or the like, either pure or reduced with water, or mixed as a paste with a pure pulverized silicic acid. It may be applied with a brush, but does not then act as rapidly. It is further recommended to bind it on with rubber, paper, or other confining material. It causes considerable pain for a few hours (Bum says 1-3), and is usually removed in twenty-four or less.

Joseph (*Deut. Med. Woch.*, 1885, No. 43) cured a leucoplakia buccalis with eighty per cent. diluted lactic acid.

Schnitzler reported at the September *Naturforscher-Versammlung* his experience with it—not very favorable—in tuberculosis of the larynx. Krause, of Berlin, has also used it in this affection, and Jellinek (*Wien. Med. Wochenschrift*, 1885, No. 46), in Schrotter's clinic, has for some months given it a more thorough trial. For this purpose he prefers a 20 to 30 per cent. solution. The healthy mucous membrane is but slightly affected, while infiltrated portions are slowly destroyed. The more succulent the infiltration, the more vigorous the action; oedematous parts shrink in three or four days, and troubles in deglutition are rapidly relieved. Most favorably affected were small ulcerations, especially on the vocal cords; larger sores were only prevented from further growth. In ulcerous, granular and hypertrophic pharyngitis he had good results. In nasal troubles simple brushing does not suffice; longer contact is necessary. Jellinek believes that in laryngeal phthisis, by daily application, more can be accomplished with this than any other remedy, and that in its earlier stages it can be cured.

Bum (*Wien. Med. Wochenschrift*, 1885, No. 47) has for several months been employing it in fungous, *i. e.*, tubercular disease of soft parts—skin, subcutaneous tissue, lymphatic glands—in dispensary practice. The unhealthy granulations are reduced to an easily reducible pulp; the walls of the cavity do not bleed; after two or three applications, with intermediary pauses of two days, a permanent dressing of iodoform gauze is used, abundant healthy granulations develop, and a smooth, soft scar results. Lactic acid will attack healthy as well as unhealthy epidermis, but in the subdermal tissues it seeks out fungous nests and destroys them. Bum gives the histories of nineteen cases in patients from one to fifty-two years of age. There were eight males and eleven females; eight ulcers, seven fungous and four fistulous. The average number of acid dressings was three, and the average time of cure twenty-five days, or, deducting one who removed dressings, but nineteen and eight-tenths days. No failures, and up to date, six weeks to five months later, no relapse.

Finally Mosetig has returned to the subject again (*Wien. Med. Wochenschrift*, 1885, No. 48), with the demonstration of good results in a large facial epithelioma in a man aged fifty-five, and an ulcer rodens on the face of a woman aged sixty. In the former he had made twenty-six applications in a month, and in the latter he had made twenty already.

In caries he finds it excellent, good demarcation being produced, and there being less liability to relapse than after curetting. He has tried injections of the acid,  $\frac{1}{2}$  to 1 grm. of a 50 to 70 per cent. solution. Whether relapses may yet occur he, of course, can not say.—*Annals of Surgery*.

---

### Nervous Diseases after Railroad Accidents.

---

*The Medical and Surgical Reporter* writes: When a serious accident happens on railroads, the more visible lesions are generally the only ones reported. But after injuries to the head, and after all accidents which are accompanied by more or less concussion, by more or less shock, the immediate consequences are often the least dangerous, and the injuries which the nervous system receives, and which generally make their appearance later, are more important than the morbid signs first visible at the time of the accident.

That the subject has received special attention only of late can not surprise, for the attending surgeon, after the wounds have healed for the treatment of which he was called in, leaves the patient apparently restored, and often never hears of him again. But of late the grave consequences of such accidents to the nervous system have become more frequent, probably because the concussion suffered by the victims of modern railroad wrecks is severer on account of the greater swiftness of the trains.

Charcot considered the nervous phenomena, which so often develop after the immediate consequences of these injuries have disappeared, to be of an hysterical character; and this view has been held by most observers until Dr. H. Oppenheim, Assistant to the Nervous Clinic of the Charité Hospital in Berlin, investigated the subject, and published the result of his researches in the *Arch. f. Physiol.*, Bd. xvi., H. 3, '85.

From this report we learn that the psychical disturbances occurring after such accidents, usually assume the character of hypochondriasis, while amongst true neuroses hysteria, epilepsy, and various forms of neurasthenia are observed. That we have to do in these cases with genuine neuroses is apparent from a group of symptoms very common in these cases; stubborn headache, vertigo, vomiting, disturbances of motion, impairment of motion, impotency, difficulty in micturition, sensation of a tight band around the trunk, and

even immobility of the pupils and atrophy of the cystic nerve.

But though these nervous phenomena in all these cases have more or less the same fundamental character, they are grouped differently in different cases. In some the picture they present does not fit into the frame of any one group; and many cases show a mixture of psychical and nervous symptoms, and are, therefore, partly psychoses, partly neuroses. In many instances, we, besides, observe signs which clearly indicate a chronic grave lesion of the central nervous system.

Dr. Oppenheim lays special stress on the importance of not considering simulation when the group of symptoms is such as not to harmonize with our view of what it should be. So many psychical and nervous anomalies are often observed in these cases, that we should long hesitate ere we ascribe to simulation what may after all be a grave lesion.

Concerning prognosis, Oppenheim has never yet seen a case of complete cure. Especially when the symptoms occur in an employé, who continues in the service of the company, the prospects of a cure are very small. In some cases the symptoms are in the beginning for a long time mild, and then assume a graver aspect, a point well to be remembered in the prognosis.—*Weekly Medical Review*.

---

### Psychical Impression as a Hemostatic.

---

DR. H. CORSON, Coonshocken, Pa. (*New York Medical Journal*, May 22, 1886), says that early in his practice he lived near an old lady who was reputed to have the power "to stop blood and take out fire." After her death people came to her to get her to exercise her "gifts," but were told by a friend of Dr. Corson's that the old lady was dead, but that as for her "gifts," this friend would say: "Dr. Corson can do it now; he used to attend the old lady, and can do it as well as she could, but he is not at home now." In this way it got abroad, without Dr. Corson being aware of it, that he could "pow-wow" effectually, and that as soon as he could see a person who was bleeding it would stop. In consequence, he had the following experience in two cases: "I was called at midnight to see a man who was said to be bleeding to death after having had a tooth extracted by Dr. Pawling. I inquired why they did not send for Dr. Pawling.



'The man wants you.' After a little parleying I went. There was a wooden bridge over a stream on the road, only fifty yards from the house, and the noise of my horse's feet, when they struck upon it, could be plainly heard by those in the house. I found the man covered with blood; all the front of his chest and down along his side it lay in clots: I said: 'Do you still bleed?' 'No, not now.' 'When did it stop?' 'Just now.' So I sat down, fifteen minutes perhaps; still not a drop did it bleed. Where the large molar had been there was a large clot of blood. I thought, Now, shall I go home? it will probably bleed again; so I concluded to remove the clot and stuff the cavity full of cotton saturated with a styptic. I cleaned it out completely, and not a drop of blood came. I waited a while again, but there was no bleeding, and I went home. It bled no more. A couple of months after this, I was asked to see an intemperate man who, at a tavern near by, was bleeding from the nose. He was sitting on the porch, and several persons there had been attending to him. He could see me coming when I was the eighth of a mile away. He had a very large, red nose. I found him sitting on a bench. His clothes were smeared with blood, and he had bled many hours, but there was none dropping then. 'Why,' said I, 'your nose don't bleed now.' 'No,' he said, 'but it only stopped a few minutes ago.' After talking a few minutes to those about him, I took hold of the end of his big nose, and shaking it, said jocosely, 'Oh, it will bleed no more,' and went home."

From these cases he is of the opinion that if, in cases of flooding, the patient could be inspired with confidence that there was no danger which her physician could not avert, it would be a powerful means of safety to her.—*Medical Review*.

---

### A Few Practical Observations on Vaccination, the Preservation of Lymph and Other Points.

---

Read before the Nottingham Medical Society.

BY ENOCH SNELL, F. R. C. S. E.

District Medical Officer and Public Vaccinator for Nottingham.

---

MR. PRESIDENT AND GENTLEMEN:—I propose in this paper to consider not only the manner which experience has shown me is the most appropriate method in which vac-

cination should be performed, but to treat of the preservation of lymph, some of the objections that may be urged against vaccination, and, lastly, to refer to the question of vaccino-syphilis.

In the first place, let us consider the operation of vaccination and the preservation of lymph, which my own experience as a public vaccinator has taught me to be of practical importance.

Use a plain bleeding lancet for vaccinating, it being the most readily cleaned. A sewing needle is a convenient substitute; it is always at command, is found in every house, and, being only used once, cleanliness is insured.

Make the punctures or scratches on the child's arm as far apart as possible, having regard to the appearance of the arm from the position of the cicatrices in after-life; by attention to this the vesicles are less likely to coalesce. Without adopting this precaution much trouble may follow, especially in scrofulous children.

In summer the formation of the vesicle is more rapid than in winter.

Three months is stated to be the best age for performing the operation, but I decidedly think above this age to be preferable, between the fourth and fifth month.

The risks of vaccination are undoubtedly increased by opening the vesicles, and unless lymph be required, such a proceeding is most unjustifiable. Never under any circumstances postpone a vaccination without certifying such postponement, as, if the child be taken to another for the performance of the operation, and information withheld, the vaccinator will obviously be placed at a disadvantage. Be very careful not to take too much lymph from a single vesicle, as by so doing irritation is produced, and erysipelas and other complications may follow; and never under any circumstances countenance the use of vaccination shields.

I will read an extract from a letter which appeared from me in the *British Medical Journal* last year, which expresses my views in respect to these potent agents in the spread of erysipelas, etc.

"As regards vaccine shields, I look upon them as a source of harm, and sometimes of actual danger, to the children upon whose arms they are used, and personally speaking, I do not know a single good point in their favor. The shield, to hold it in its position, has to be tightly tied round the arm, which obstructs the circulation and produces more or

less congestion in the immediate neighborhood of the vesicles, and this, I need hardly say, it is most necessary to avoid. 'On the other hand, if the shield be not tightly fixed, it moves about on the arm, and its hard and dirty edges coming in contact with the vesicles, rub them into open sores, and probably inoculate them with impure discharge from another child's arm, as, *and I make a strong point of this*, in poor localities the mothers are in the habit of lending them to one another.'

I was called to see, not long since, a child I had vaccinated in this town, and was let in for a fair share of wrathful indignation. It was suffering from erysipelas, which soon assumed a serious character. I was at a loss to account for this disorder, knowing the origin of the lymph, and having used it also for three other children, all of whom had done well. I discovered one of these objectionable shields in the room, which I found on inquiry had been sent in to the mother by her next-door neighbor, with full instructions as to its use and with an earnest entreaty that she would use it for her child, as she done for hers a few weeks before.

Just a word in respect to the treatment of vaccine vesicles.

I always urge upon the mothers who bring their children to my station, on no account to use any moist application, but, on the contrary, to let the vesicles dry and form a scab; and, if there be a tendency in the vesicles to "run," then to dust them well with powder of oxide of zinc. In cases of tardy recovery, especially those associated with an eczematous condition, I find an invaluable remedy in this ointment:—

Unguentum hydrargyri ammon. ʒ j. to  
Unguentum plumbi carbonatis ʒ j.

Of this prescription I can not speak too highly, for it rapidly promotes a healthy appearance in the vesicles.

Dr. Sinclair (I think of Edinburgh) has lately suggested the use of white blotting paper, when the vesicles remain moist for a considerable time. But I have no experience in its use.

#### *The Preservation of Lymph.*

Much has been written in respect to the preservation of lymph, both animal and humanized.

Humanized lymph preserved in tubes soon becomes inert,

and after being stored for a few weeks, *always* fails to produce, when used, *typical vesicles*. This is a startling opinion to express, and I am conscious that I make it before those who are accustomed to use lymph after being preserved in this way for months. But my opinion is based on a long experience: and I never obtain with lymph stored beyond a few days such typical vesicles as those produced by it in its fresh state.

Lymph in tubes may be preserved for a far longer period, if the precaution of keeping them in a cool place be adopted. But even then the results are not satisfactory.

Warlomont says: "Vaccine may be preserved in tubes for ten, twelve, or fifteen months, but to say of a thing that it may be, is not to say that it always or often happens." And he mentions a test case between two vaccinators. He says: "We vaccinated together, and for purposes of comparison, an equal number of children, some from arm to arm, others with vaccine preserved in tubes. The difference in the two modes was apparent in the result. The second produced about half as many vesicles as the first, although the vaccine in tubes had not been taken a month."

How then can lymph be best preserved to suit our requirements? For we must have it ready at hand.

On July 21st last, I took some vaccine in tubes from a carefully selected vesicle, and sealed them. I also took some of the *same* lymph in my watch glass, mixing it with about twenty-five per cent. of glycerine, covering it over with another glass, and placed them in a pill box in a cool cellar.

On October 16th I vaccinated from both sources, obtaining, as I expected, my accustomed ill success from the tubes; but after thoroughly stirring up the lymph preserved in glycerine with a lancet, I obtained from it as good results as if my vaccination had been performed with fresh lymph.

The result of this experiment may perhaps induce some of you to try the same method of preservation, and your results will, I have no doubt, be equally gratifying.

At what period in the development of the vesicle is it best to take lymph for preservation?

For all practical purposes the eighth day does very well, but in hot weather a little earlier is preferable, as lymph taken from vesicles too fully matured is liable to fail.



## The Treatment of Acute Infantile Bronchitis.

---

At a recent meeting of the New York Academy of Medicine, Dr. J. Lewis Smith read a paper with the above title (*Medical Record*, March 6, 1886). The subject was considered under two heads: (1) mild and (2) severe bronchitis. He believes that simple bronchitis could be aborted, or rendered milder, by an emetic employed when the first symptoms appeared. For this purpose ipecac was probably the best. Measures designed to abort the disease, however, were not usually indicated when the patients were first seen; to be employed with success they must be adopted very early.

The treatment for mild, uncomplicated, primary bronchitis was very simple. A favorite mixture of the late Dr. Jackson, of Boston, consisted of equal parts of almond oil, syrup of squills, simple syrup, and mucilage of gum arabic. Of the mixtures in the dispensatory the *mistura glycyrrhizæ composita* was the best. The compound syrup of ipecac of the French Pharmacopœia was a most elegant mixture.

When the temperature was 102° F., and above, and the respiration correspondingly accelerated, he had been accustomed to use a mixture consisting of sweet spirits of nitre, syrup of ipecac, and syrup of balsam of tolu.

*Severe Bronchitis.*—When the inflammation involved the smaller bronchial tubes localized atelectasis was liable to occur, and also catarrhal pneumonia, which was one of the most dangerous diseases of infancy.

The indications for treatment in a severe case of bronchitis were to promote expectoration, to diminish inflammation, to strengthen the action of the heart, and prevent exhaustion.

In reference to cough there was safety in it, and he seldom added opium to any of his prescriptions which were designed to relieve cough. Although children did not expectorate, the bronchial tubes were as effectually emptied when the sputum was swallowed. To facilitate expectoration two remedies have been used largely, namely, carbonate and muriate of ammonia; the latter was preferred in most cases, except in the advanced stages, when the former might be advantageous as a stimulant.

A favorite formula for the use of muriate of ammonia with him had been muriate of ammonia, one drachm; balsam of tolu, two ounces. When there was great dyspnœa and in-

dications for clearing the bronchial tubes of mucus, this remedy should be administered every half hour. Dr. Smith had not witnessed any marked benefit from the use of senega or squill. To get rid of large quantities of mucus an emetic was sometimes proper.

*To sustain the Patient and reduce the Fever.*—He had not noticed any marked reduction of the temperature by the use of quinine, but it seemed to him that it had been useful as a heart-tonic administered in small doses. For a child one year of age, half a grain to one grain. Antipyrine might be of service, but care should be exercised in its use. In a vigorous infant, suffering from bronchitis without or with only a very slight amount of pneumonia, it might be used. Digitalis, as a heart tonic, was one of the best which could be employed. Alcoholic stimulation was necessary in severe cases; two or three drops of whisky in water, for each year of age after three months, given hourly or every second hour.

*External Treatment.*—Leeching and vesication have been abandoned. Slight irritation of the surface affords relief, and for this purpose he had been accustomed to use a flax-seed poultice, first rubbing the chest with camphorated oil in young children, and using a mixture of mustard and flax-seed, one to sixteen, in older children, enveloping the chest with the poultice and covering it with oil-silk. In those cases in which there was hurried respiration, accompanied by continued moaning, to cover the chest posteriorly and anteriorly with a poultice, and over the whole place an oil-skin jacket, would afford marked relief.

In robust children the application of cold to the chest during the acute stage, as recommended by Henoch, of Berlin, might be of more service than poultices. For all infants under six months of age, however, poultices were preferable.

Change in the position of the child he regarded as a most important element in the treatment, laying the child first upon one side and then upon the other, and upon the back.

The chairman invited Dr. A. Jacobi to open the discussion, who said that whenever Dr. Smith read a paper, very little, if anything, remained to be said. There were some points which he would like to impress upon those present, and who would doubtless see more of these cases hereafter. One of the principal points to which allusion had been made, and of which he wished to speak, was the use of *opium* in these cases. We could not do well without

opium in many of them, because there was so much irritation; but he would emphasize the necessity of giving as little as possible. If it was to be given at all, give a good-sized dose at night, for the purpose of securing a number of hours of sleep. He would express his conviction that in no small number of cases of capillary bronchitis and acute pneumonia in adults the patients died in part of their disease, in part of the influence of opium. Certainly opium would suppress expectoration, and without expectoration bronchitis and pneumonia were almost invariably fatal.

There was one great expectorant which Dr. Smith had not mentioned, and that was *water*. Where was the expectoration to come from unless there was fluid in the body? It was all well enough to give muriate of ammonia and expect it to liquefy the expectoration; but the liquefaction could not take place without plenty of water, and the chief danger was that water was not supplied in sufficient quantities to young infants, older children being able to ask for it.

Another important point was the regulation of the temperature and moisture of the atmosphere in the room; this is especially important in all cases of so-called dry bronchitis.

With reference to the use of *digitalis*, he believed that two or three large doses in twenty-four hours were preferable to small doses frequently repeated. A child one year of age would take one grain of digitalis three times a day, for as many days as would be required, and the effect would be much better than if the remedy was usually employed.

Another exceedingly valuable expectorant was *camphor*, the effect of which was permanent, and it was more easily taken than carbonate of ammonia. A child one year of age might take one-quarter, one-half, or even one grain of camphor, rubbed up with glycerin as often as every hour or every two hours, and in bad cases of bronchitis or pneumonia, where expectoration was wanted, he had not seen any expectorant which had served him a better purpose.

Turpentine also, by inhalation, was an excellent expectorant. Put a tablespoonful or two tablespoonfuls of spirits of turpentine into the kettle of water which is kept in the room to moisten the atmosphere, and the air will be impregnated with the vapor of turpentine, which will greatly benefit the patient.

Dr. John C. Peters was asked to continue the discussion,

and said that one remedy, which was the best of all expectorants, and which allayed the cough, had not been mentioned, and that was potassium. The form in which he usually prescribed it was the liquor potassæ, one drachm to four ounces of water, which of itself was somewhat soothing. All of the alkalies, but more particularly potash, increased the ciliary movement of the bronchial epithelia, the only way in which expectoration was brought forward where it could be reached by cough. Besides, a solution of potassium would dissolve mucin, while simple water would not. He had almost abandoned the use of ipecac, except, perhaps, in small tonic doses. When there was great congestion and dyspnœa the administration of small doses of calomel, sufficiently large, however, to remove the bowels, would relieve the heart and lungs, and render *digitalis* more active than it otherwise would be.

With reference to external treatment, he had used flannel chiefly, perhaps covering the chest with cotton. He thought that the frequent changing of poultices exposed the infant too much.

With reference to change of position, he had been in the habit of placing the child on the face, and had found it very beneficial.

He never used quinine as an antipyretic, but thought it beneficial in preventing the migration of leucocytes.

Dr. Joseph E. Winters said that while, perhaps, acute bronchitis could not be aborted, the inflammation certainly could be minimized. During the time when the congestion was limited to the bronchial artery, remedies which would reduce the force and frequency of the heart's action would reduce the inflammation, and for this purpose he employed *veratrum viride*, already mentioned by Dr. Ripley, or aconite; as a reliable article of *veratrum viride* was somewhat difficult to obtain, he frequently used the latter agent. This expectation, however, was realized only in cases of acute primary bronchitis.

After this his method of treatment was to use derivatives, and then mild cathartics consisting chiefly of alkaline mixture.

The second indication was to prevent accumulation of catarrhal secretion, as here occurred all the deaths. For the prevention of the accumulation of this secretion he used stimulating expectorants, and they varied according as to whether the expectoration was thin or viscid. In this con-



dition cough also becomes remedial. During the catarrhal stage he combined camphor with other agents in a sufficiently concentrated form to excite a cough, which would, in part, be voluntary. Besides, he applied stimulating liniments to the surface of the chest, which would provoke deep inspiration. For this reason he thought that large poultices were dangerous, and that putting a pound of flax-seed, mixed with water, upon the chest of a child one year of age, would materially interfere with respiration. He preferred the oil-silk jacket, or, perhaps, spongiopylin, with cotton batting and oil-silk. The oil-silk was generally sufficient, with the use of a stimulating liniment, applied by putting the hand under the jacket, without exposing the chest of the child at all. He always insisted upon the following order in most of these cases: First, make the external application, then administer the expectorant, which would excite a cough, and then administer an emetic, and do all this at bedtime.

Opium became a dangerous remedy in young children, and he thought chloral did equally as well. When the secretion was watery and excessive, camphorated tincture of opium might diminish cough and secure rest, but it was not often indicated.

As to whether the capillary bronchitis existed independently of broncho-pneumonia, he had his doubts, because when capillary bronchitis was found at autopsy it was associated with more or less of broncho-pneumonia.

Dr. H. D. Chapin made special reference to the use of bromide of sodium, which he had used with good results. The use of opium had been pretty well condemned by the speakers by whom he had been preceded; and even in the doses recommended he had seen, it seemed to him, unfortunate results due to its use. In rachitic children he had noticed a more rapid and a more marked narcotic action produced by opium than in otherwise healthy children. In one case he felt quite certain that the brown mixture, regarded as perfectly safe in ordinary cases, nearly caused the death of his patient. For some time, therefore, he had used the bromide of sodium, and, although it did not act rapidly, yet by giving it continuously it produced a sedative effect, which had seemed to him to be safe and beneficial. He would be more afraid to use chloral than opium.

With reference to cases of mild bronchitis he thought one of the best remedies was to put the child to bed at the out-

set, and when this was done the large majority of children would get well without special treatment.

Dr. J. H. Fruitnight spoke of the use of iodide of potassium in the second stage of the disease, especially when the secretion was viscid, administered in doses of one-fourth to two grains, according to the age of the child. He favored the use of oil of turpentine combined with balsam of fir.—*Therapeutic Gazette*.

---

### Irrigation in Bowel Diseases in Children.

---

AN eminently practical article on the therapeutic value of irrigation in treating diseases of the bowels in children is contained in the *Archiv fuer Kinderheilkunde*, written by Monti, the well-known Vienna clinician and specialist in children's diseases. The article is contained in the *Manchester Medical Chronicle* for April, and deserves special reference at this season, when we are on the threshold of all the anxieties and perplexities incident to summer diarrhœas and enteric difficulties.

As regards the method of executing the operation nothing special is said. An ordinary fountain syringe, holding from two to four pints, with a soft tube one or two yards long, and a hard rubber nozzle and a stop-cock is used. Soft tubes or gum-elastic catheters can be fitted on. If the fluid is to be retained an obturator is added, consisting of a truncated cone or soft gutta-percha, which is perforated in its long axis in order to let pass the catheter. This cone is oiled and passed into the rectum, where by its expansion it occludes the passage. A low pressure is advised, and suspension if straining is apparent. About 2-2½ inches of soft catheter may be pushed into the rectum in the newborn. Experiment justifies us in saying that practically the whole of the large intestine can be irrigated. The ileo-colic valve may be passed, but only in such cases where abdominal pressure and peristalsis are inoperative.

In speaking of the application of the measure in the special diseases, Monti says, that in dyspepsia the irrigation at once removes tympanites and undigested caseine, half decomposed masses of fat or amylacea in acid fermentation. Colicky pains that prevent sleep and cause convulsions are at once stopped. Simple enemata never accomplish the desired result. The author rejects as useless the much-lauded

aromatics, such as camomile, anis seed and fennel water, that only increase acid fermentations. The quantities of water used should be adequate to fill the whole bowel up to the ileo-cecal valve, and vary with the age and weight of the child. In the new-born, weighing under  $6\frac{1}{2}$  pounds, seven to ten ounces are enough; in heavier children, ten to fifteen ounces; in sucklings in the first four months, seventeen to twenty ounces, and so on up to forty ounces. Percussion of the colon tells us when the bowel is filled. If colic comes on, allow the fluid with the gas and solid ingesta to escape; then resume and finish the operation. In chronic dyspepsia the proceeding may be practiced twice daily for some time.

In coprostasis the accumulations come away by irrigation, properly done. Some laxative may be injected with the water.

In habitual constipation, not alone accumulated fæces are removed, but also the inertia of the bowel is overcome. The irrigation should be made at a fixed hour, and a large quantity of water used. And the temperature of the water becomes an important factor. In the beginning of this methodical treatment the water should be about  $86^{\circ}$  F., and gradually a temperature as low as  $55^{\circ}$  F. is to be reached.

The value of the practice in enteritis follicular is denied by Hensch, but Monti is emphatic in favorable recommendation. He says: "Thorough irrigations of the large intestine are indicated in all cases of enteritis without exception, mild or severe, acute or chronic. The regulation of the diet on definite principles, and the irrigation of the bowel, either with water or medicated fluid, chosen according to the indications present, are the only rational measures that can be taken in all cases of enteritis. I treat all my cases of enteritis with nothing but suitable diet, and locally with carefully managed irrigations of the intestine, and only in exceptional cases do I ever give internal medicine. The irrigation must be commenced at once, whether the symptoms are local or general; waiting till the case is more serious is only depriving ourselves of a valuable mode of treatment. There are really no difficulties in the way of any one carrying out this treatment. Large quantities of fluid must be injected. Mere clysters are useless. I begin the treatment of acute enteritis with an irrigation of water. The temperature of the water should vary with the severity of the disease. In slight cases, where the stools are

just slimy, where the tenesmus is moderate and there is no fever, I use water at 72° F., in severe cases I take fresh water from the tap. The first washing out, if properly done, is generally followed by good results; straining ceases, and there is no motion for several hours. As soon as the straining and characteristic dejections disappear, an astringent irrigation should be given. One or two per cent. solutions of tannin or alum may be used, or a half per cent. solution of acetate of lead. Disinfecting solutions, carbolic, salicylic, or resorcin, do not do good in acute cases. These injections should be given twice a day until the pathognomonic stools disappear. In all cases of chronic enteritis, with putrid dejections, disinfecting solutions of benzoate of soda, boracic acid, resorcin or salicylate of soda should be used, and after the dejections have ceased to be putrid, astringent or simple irrigations should be employed.

In catarrh of the small intestines, Monti considers the irrigation of the large intestine as only an aid to internal and dietetic treatment.

Also in infantile cholera he believes the irrigations indicated only at the beginning of the attack and before collapse is manifest. In collapse they should be discontinued. Three irrigations at the commencement of the cold stage, either of one per cent. of common salts, or two per cent. tannic acid, and in severe cases a solution of benzoate of soda, 500-100 in 1,000 parts, or six drops of creosote in 1,000 parts are useful.

Irrigations are indicated in all cases of dysentery and of conspicuous service. Water is first used to wash out the bowel, and cold compresses to the abdomen are made. Iced milk and tea with lemon and rum are given. The next irrigations should be astringent as described for follicular enteritis, two or three a day being administered.

Monti has also employed weak solutions of common salt (a drachm to thirty-five ounces) to remove tympanites in abdominal typhoid fever; the temperature should be about 66° F., large quantities being necessary to secure good effects. Astringent solutions of a mild character benefit profuse diarrhea. No extended trial of the method has been had in this ailment.

Caution is necessary in cases of typhitis or peri-typhitis; much harm can come from irrigation during the periods of active mischief, when the temperature is much elevated. Also in invagination of the bowels. Unless the seat of it is



in the colon, especially the descending colon, and the intussusception is recent and not too extensive, no good can be expected from irrigation. In ileum or ileo-cecal invaginations success is rare. The author advises a warm bath for a half hour of 95° F., previous to the injection, the patient in addition being chloroformed to relax all muscular effort. The pelvis, too, should be raised very high. And to this end we believe that the posture proposed by Cari Nicolaus, the knee-shoulder posture, as described in the *Review*, March 13, 1886, would be a highly proper and useful one. A soft catheter or tube should be introduced as far as possible into the bowel, and the water introduced at a low pressure first. On regurgitation stop the procedure, and then cautiously begin again, increasing the pressure. Use external manipulation at the same time. If water fails to reduce the obstruction, air may be insufflated or carbonic acid water. Luke-warm water should first be used to relax the bowel and enable the introduction of a large quantity of water. The finish may be with ice-cold water to excite peristalsis.

Helminthiasis, also, especially cases of oxyuris vermicularis, pin worms, were successfully treated by the complete irrigations repeated a half dozen times or more on successive days. To clear the small intestine, a purgative should first be given. Medicinal soap, 1-5 parts to 1,000 parts of water, is the best irrigation in such cases.

Taenia were also treated by the combined method of washing out the bowel in the morning with 2-4 pints of luke-warm water; the same is done in the evening with the addition of a purgative. Next morning pomegranate is given by the mouth, and, after the first evacuation, a solution containing pomegranate is thrown up into the lower bowel.

The article, all in all, contains many practical points based upon rational thought and actual experience.

---

### Treatment of Fistula.

---

A NUMBER of weeks ago a lady about thirty years of age, unmarried, of a perhaps somewhat strumous habit, presented herself for advice in regard to a sore over the lower end of the backbone, which had existed for several years despite the various kinds of treatment to which it had been subjected.

It had, she said, originated in the formation of a "boil," which was at the time lanced and its contents evacuated. Since that time, however, it had continued to gather and break at intervals of from one to two weeks.

On examination I found a fistulous tract, perhaps two inches or more in depth; directly over the lower end of the sacrum and closely hugging its spines. The surrounding parts, together with the tract itself, had become thickened and hardened, and presented an opening about a quarter of an inch in diameter. It was a source of great annoyance in many ways, and the woman had submitted to all sorts of treatment nearly, without relief, until she was completely discouraged. It had been injected with iodine, carbolic acid, etc., cut open, setoned, and what not, all without avail. I had had some experience in the use of iodoform in the destruction of the peculiar property of pyogenic membrane, and concluded before resorting to anything else to give it a trial in this case. I used a uterine suppository carrier which I had at command, filled it to the depth of about an inch at a time with iodoform, and after inserting to the bottom of the fistula, with the piston pushed the powder out, and repeated the process thus until the cavity was entirely filled with the powdered iodoform.

The result has thus far been all that I could possibly have expected. The fistulous opening has been closed now for several weeks, under the influence of several repetitions of the treatment, the tissues about the seat of the disease have become more healthy in appearance and feeling, and the soreness and the tenderness have in the main subsided.

I detail the above case for the benefit of any who may have analogous conditions presented for treatment, and which have resisted other methods of management.—*Peoria Medical Monthly*.

---

### Permanganate of Potassium in the Treatment of Amenorrhœa.

---

THE author recently read a paper in which he first showed the importance of the subject by a reference to the sixty-nine cases reported by Ringer and Murrell, and quoted their conclusions regarding the class of cases in which the drug was useful. Since Ringer and Murrell's article appeared, the remedy had been employed by many other physicians

both abroad and in America, and the results had been tolerably uniform. The author's experience had been limited to four cases, but these, taken in connection with those reported by Ringer and other authors, possessed some significance. In the first case the patient was eighteen years old, chlorotic, and suffering from malarial poisoning. For the nine months that she was under observation she menstruated only once, and then just after the administration of permanganate of potassium. She positively refused, however, to continue the medicine, because of the gastric disturbance which it caused. The second case was that of a girl of seventeen, who had menstruated regularly until a certain exposure to the rain, when the flow became scanty and almost colorless; her health then declined, and she suffered from headache, coldness of the extremities, pallor, etc. Besides other remedies, she was given permanganate of potassium in two-grain capsules, three times a day, but they were discontinued for a time on account of gastric irritability. Before the next period, the condition of the stomach having been improved, she was able to resume the capsules, when she menstruated normally, and rapidly regained perfect health. The third case was that of a girl of about eighteen, who had menstruated regularly, but, without known cause, had ceased to menstruate, and become chlorotic and feeble. Other remedies having failed to restore the menses, permanganate of potassium succeeded. On one or two occasions, however, while the remedy was being continued, a period passed without any flow, probably because such large doses were not given as were said to be necessary in some cases. In the fourth case the patient, who was sixteen years old, had begun to menstruate a year before. The flow had appeared only four or five times, and she had palpitation and shortness of breath. She began with two two-grain capsules of permanganate of potassium three times a day, and during the night of the first day, when she had taken three capsules, the flow came on. This patient also complained, after taking the medicine, of an unnatural sensation under the upper part of the sternum.

With regard to the manner in which the remedy acted, different views were held. The author agreed with those who did not believe the beneficial effect was due to its improving the blood and anæmic state; some patients so benefited were not anæmic, but, on the contrary, were plethoric. There were also conflicting views as to whether permanganate

of potassium or other forms of manganese acted as general blood restoratives. Ringer denied it; others held an affirmative view. Regarding the question whether binocide of manganese was equally efficient as an emmenagogue as permanganate of potassium, the published testimony was not abundant, but Ringer and Murrell thought it was, while Dr. T. Gaillard Thomas considered it equally efficient and much better tolerated by the stomach.

Regarding the method of administration, it had been seen that permanganate of potassium often produced severe gastric disturbance, and some preparations were more likely to produce this result than others. The author preferred to give it in capsules. Its use should be begun a week before the expected menstruation, and, if it acted favorably, might be continued during the interval, or be suspended and resumed at a corresponding period the next month.—*New York Medical Journal*.—*Medical Analectic*.

---

## The Pathogeny of Pneumonia.

---

BY R. H. DAY, M. D., BATON ROUGE.

Ex-President Louisiana State Medical Society.

---

“Is acute lobar pneumonia a primary local inflammatory disease, or is it an essential fever, the pulmonary affection being secondary thereto, constituting its anatomical character?” The above is the main question in a series in regard to pneumonia discussed by Dr. Flint and others before the New York State Medical Association at its last annual session. The discussion was nearly all on one side, and the conclusion reached, nearly unanimously, that pneumonia is an *essential* fever, and *not primarily* an *inflammatory affection* of the lung tissue.

Dr. Flint says: “First, acute lobar pneumonia is characterized by an enormous exudation into the pulmonary alveoli, and this exudation may be rapidly absorbed, leaving the tissues intact.” This, in a general sense, can be accepted as true, but unless he did not mean as to the quantity of the exudation, what the word “enormous” naturally conveys to the mind, and use the word “rapidly” as to time I must seriously affirm that the statement is misleading and incorrect. The exudation into the alveoli of the lungs, by reason of their anatomical structure, can not be “enormous,”



though every interstice be filled; neither can this exudate, when once effused, "be rapidly absorbed," by reason of its gelatinous character and the necessarily debilitated condition of the capillary veins and absorbents.

"Second—Acute lobar pneumonia never persists and becomes a chronic affection." In Dr. Flint's experience and that of those who agreed with him, this may be so, but in my experience the statement is not correct. Such a result is not frequently the case, I cheerfully admit, yet I have witnessed in the course of my professional career several cases of pneumonia persisting and running into a chronic character.

"Third—It is never referable to any appreciable local condition, nor is it possible, by any form of traumatic injury, to produce the affection." In reply, I submit respectfully that the first part of this assumed *fact* is ambiguous, and hence can not be discussed; but the latter part can well be denied from the concurrent experience and testimony of able medical writers.

"Fourth—Ordinary causes of local diseases (inflammation) are not capable of producing acute lobar pneumonia. The traditional belief that the affection may be produced by a cold is without foundation, and is being abandoned even by the Germans." The first part of this statement is already shown to be incorrect. The latter clause is equally, and at the same time more demonstrably, unfounded in fact. That cold is the most prominent, tangible and constant cause of pneumonia, is affirmed by the best medical authors, from Hippocrates down to the present day, and is in harmony with the experience of our most observing and practical physicians.

"Fifth—That a special or specific influence is invariably the cause of acute lobar pneumonia is rendered probable by its occurrence at certain seasons, greater frequency in certain climates, and occurrence at times as an epidemic disease." Now, with all due deference to Dr. Flint's medical acumen, I can not refrain from expressing the opinion that the reasons he has given in the above quotation to prove the truth of his startling and pet theory that pneumonia is an essential or specific fever, and the result of a specific germ, are weak and inconclusive, to say the least; for it is simply saying what may as truthfully be affirmed of almost every known disease.

"Sixth—It differs from acute primary local inflammation

in that at the outset there is a pronounced chill. It is very strange indeed if, with Dr. Flint's long experience in the practice of medicine, he has seen no acute local inflammations ushered in with a chill. In my experience it is a common thing—I might say almost universal—and especially so with local inflammations of any gravity or affecting important organs or tissues. If a "pronounced chill" ushers in an attack of pneumonia, which is certainly the fact in nearly every case, it is no evidence whatever that the hypothetical "pneumo-coccus" has entered the circulation and set up its specific systematic fever.

The remarks of Drs. Flint, Didama, Ross and Janeway in this notable discussion impress me as being a labored effort to hunt up reasons to prove the truth of a preconceived and speculative theory. Indeed, Dr. Janeway, while expressing his belief in the pneumo-coccus as the causative agent of this disease, referring to the labors of Klebs, Eberth, Leyman and Friedlander as ground of his belief, was candid enough to state the fact that Dr. Sternberg "had recently claimed that the pneumonia coccus of Friedlander is identical, specifically, with a micro-organism previously described by himself, which is commonly found in normal human saliva."

I do not wish it to be understood that because I enter my protest against the theory of Dr. Flint and his co-believers, as to the causative agent and nature of pneumonia, I discard *in toto* the science of bacteriology; for this is not true.

---

## The Filaria Sanguinis Hominis in the United States— Chyluria.

---

By JOHN GUITERAS, M.D., Passed Assistant Surgeon U. S. Marine Hospital  
Service.

---

LIKE other nematodes, the trichina, for example, this one requires an intermediary host to complete its life cycle. In the case of the filaria, it is the mosquito that performs this important function. The blood drawn by some species of this insect from a filaria subject is found to contain a large proportion of embryos. These seem to get entangled in the proboscis of the culex. Within the body of the mosquito the embryo develops, and undergoes changes which, upon the death of the host, enable the worm to live an independent ex-

istence. The semi-developed form is either discharged by the mosquito with her eggs into the water, or it frees itself by boring through the carcass of the host, which often falls into the water where her eggs were laid. The subsequent steps, though not positively demonstrated, appear to be obvious, namely, the easy access in the water to the human stomach, and the final lodgment in some lymphatic vessel.

The prophylaxis of these diseases is based upon this knowledge. All cisterns should be screened in order to prevent the access of the mosquito, or what is better still, no rain water should be used for drinking purposes without having been previously filtered.

The number of filaria-infested individuals that have come under my observation is five. Four of them were males, and Cubans residing in Key West. The Charleston patient is a female. They were all between the ages of twenty-five and forty-five years. The duration of the disease is difficult to determine, but it probably averaged over five years. Three of the patients were whites, and two were mulattoes.

Four of these patients were afflicted with chyluria, and the other had a doubtful history of lymph scrotum. The condition which I found common to all, was an intestinal dyspepsia, with frequent attacks of enteralgia, which often preceded and accompanied attacks of diarrhœa. All the patients had lost flesh. They were anæmic, and showed a peculiar ashen hue of the face, and slight irritation of the eyelids.

In all these cases the embryo *filariæ* were found in the blood, and I had ample opportunity to confront the specimens with the descriptions I found in the works of Devaine, Lueckhart and Manson, of the embryo as found in India, China, South America and the West Indies. The two correspond in all the details, both anatomical and physiological. In none of my cases did I find the embryo in the urine; but I must state that a thorough search was made in only two of the cases.

I also examined, in Key West, the blood as well as the discharges from the affected part, in three cases of elephantiasis of the leg. The results were negative. Nor did any of these patients show other evidences of filaria disease.

Chyluria, then, seems to be the most usual manifestation of the trouble in North America. I have met with two forms of chyluria; the parasitic and the idiopathic. The

parasitic is a manifestation of filaria disease. The idiopathic is, I believe, the expression of a relaxation of the pelvic lymphatics. This condition is often but a part of that general relaxation of the pelvic tissues which is common amongst women.

So far as the chylous urine itself is concerned, the microscopical appearance and the chemical composition were the same in both cases. In both cases the milky urine and the coagula were due to the presence of lymph and chyle. The coagula may render micturition a very difficult and painful process. I have seen the urethra enormously distended during the passage of one of these clots. In both cases we had the frequent admixture of blood in the urine, which has given the disease the name of hæmatochyluria. In my Key West cases, the color of the urine, and the number of red corpuscles which were met with sometimes, specially after greater exertion, converted me to the opinion that there must be occasionally an admixture of blood from rupture of small blood-vessels, or capillary oozing. The theory of Manson, that it is simply a regurgitation of lymph from the larger lymph trunks, where this fluid begins to assume the character of blood, seems to me unsatisfactory.

To these points of resemblance between the two groups of cases, may be added the aggravation of the chyluric symptoms upon exertion and exposure to heat, together with the existence of anæmia, which is apt to be more pronounced, and may be very intense in the parastic patients.

The points of contrast, on the other hand, were numerous. The idiopathic chyluria was much more common than the parasitic. The average age of the parasitic patients was lower than that of the other group. The female sex greatly predominated amongst the subjects of non-parasitic chyluria. In fact, out of more than twenty patients of this class that have come under my observation, only two were males. The patients were mostly women who had borne children. They presented other evidences of pelvic relaxation, such as hemorrhoids, leucorrhœa, enlargement of the uterus, and tendency to prolapsus, irritable bladder, dragging pains across the loins, etc.

In the filaria patients the dyspeptic symptoms took the place of all this. They were subject to the alternations of constipation and diarrhœa. The looseness of the bowels was always referred to by the patient to some article of food, or slight discretions in diet. Undigested food was



generally found in the stools. The pain was referred to the umbilical and hypogastric regions. It generally came on with the diarrhœa, and though not very severe, was gnawing in character, and persisted for hours at a time. The Charleston patient is subject to this pain without any marked tendency to diarrhœa. The persistency of these dyspeptic symptoms has suggested to me the advisability of subjecting the intestinal discharge to careful inquiry.

*Treatment.*—Under this head, also, we find a marked difference between the two classes of cases. The non-parasitic chyluria was found to be amenable to treatment. As a rule, the relief followed quickly upon the use of suitable treatment, which consisted in the administration of tonics; the combination that I found most generally successful was the following: *R.*—Strychinæ sulphatis, gr. j. Ergotin, gr. v-xx. Ferri sulphatis exsic. gr. vj.—*M.* Ft. pil. No. xxv. *Sig.*—After meals.

Great, or even complete relief was apt to follow the administration of either copaiba, turpentine or glycerine. Not more than five minims of the two former should be given at a dose, four times a day. These drugs may be advantageously combined with glycerine. I am convinced that glycerine does not act merely the part of an incipient in turpentine mixtures. It acts, I believe, as a powerful tonic of the pelvic circulation. Subacute and chronic dysenteries, internal piles, and congestions of the uterus, are often greatly benefited by the internal administration of glycerine in drachm and half drachm doses.

Together with this treatment, rest should be enjoined, and cooling drinks, such as lemonade, and orgeat, with ice, should be recommended.

The patient with filaria can hope for no permanent relief, except in the death of the adult worm. This happens occasionally, but can not be brought about by treatment.

---

### Incipient Locomotor Ataxia.

---

BY PROF. ROBERTS BARTHOLOW, M. D.

---

THE first case which I bring before you to-day, gentlemen, possesses very great interest from a diagnostic standpoint. You will not infrequently be confronted with such cases, and it is of the utmost importance that you should be

able to recognize them, for your only hope of relieving the patient will rest upon a correct appreciation of the condition. There are some very fine points involved in the diagnosis, and we will consider them together. We have presented to us a man apparently robust and vigorous, who is in the prime of life, and who comes to us to be relieved of a derangement of his sexual organs. At first, he tells us that he was troubled by an unnatural excitability of these organs; he had a great and unusual desire for sexual intercourse, and his organs and power seemed to be in good condition, save only for his hyper-excitability. This condition was followed by a decline in his passion, when he found himself unable to have an erection, he was troubled by nocturnal emissions, and there was a growing inability to satisfy the demands that existed. On the least exertion he would have a discharge of semen. Such is the complexus of symptoms which he offers to our observation, and I need not tell you that such a condition has caused him much anxiety, for there are few things that will so worry a man as to have anything wrong with his sexual apparatus. A man in his condition suffers morally in his character, for he soon acquires the reputation of possessing inordinate sexual desire, and if he gratifies it, he is apt to secure a somewhat bad moral character. When a man of good physique, and apparently robust, exhibits an excessive sexual desire, his neighbors are very apt to calumniate his moral character, which is an additional reason why you should be on the alert to detect the true nature of the trouble. Well, now, when a man, in vigorous health, to all appearances, comes to you complaining that he has been troubled by hyper-excitability, followed by a decline in power of sexual organs, what would you most naturally expect to be the matter with him? Well, if you were to consider the condition of the sexual organs as they present themselves to you, without looking any further, you would be apt to say the man was suffering from spermatorrhœa. But it will not do to thus make a snap diagnosis, for, since such a condition may be due to other and much more serious causes, you should look further and see whether it is not due to some disorder of the nervous system. Well, what disease of the nervous system might give rise to such phenomena? We are all familiar with the fact that this abnormal condition belongs to the early history of locomotor ataxia, the very first indication of which may be, in some cases, this increased ex-

citability of the nervous system. Well, now, have we, in this case, any other symptoms of that peculiar malady? One of the very early symptoms, as you know, is a loss of the patella-tendon-reflex; so I at once proceed to look into the condition of the knee-jerk in this case, and I find that when I make a very strong stroke I elicit a very feeble response; it is very feeble and only produced when the leg is held in one particular position. Therefore, I say, that while the knee-jerk is not entirely absent, yet it is disappearing. Well, having elicited this important sign, we ask, Are there any further evidences of locomotor ataxia?

We now inquire more critically into the history, and we find that, although he is a vigorous man, in his prime, about forty years of age, he has some trouble with his eyes; he has amblyopia, and he has been compelled to wear glasses, that ought ordinarily only to be used by a much older man. In this fact we see also a symptom that is peculiar to the early stage of locomotor ataxia; he has also probably at times had double vision. This condition of the eyes I would impress upon you as of great importance, for you will be very apt to erroneously attribute it to the unusual decay of age, and thus overlook its importance as a diagnostic sign that will enable you to recognize this terrible disease in its incipency, when you can hope to do some good for your patient. Of course, taken by itself, it amounts to nothing, but when the power of vision is affected in connection with this disorder of the sexual system, and there is diminution or loss of the knee-jerk, then it is a very pregnant symptom, and one that may serve equally to aid you in arriving at a conclusion in what would be otherwise a very obscure case. It is just such a case as this one that will tax you greatly when you get out into practice.

It seems comparatively simple, when you hear me unfold the case before you, but when you are compelled to rely on yourself solely, when you have no one to consult, and when, under such circumstances, a man comes to you offering only a few obscure symptoms, each one of which might belong to any one of several diseases, you will find yourself non-plussed unless you remember these little points, and unless you cultivate the habit of considering the complexus of symptoms, the relative importance of each as associated with the others, as well as the significance of each individual symptom.

Now, also, one of the earliest symptoms of locomotor

ataxia, and one that very frequently is erroneously viewed, thus leading to a misconception of the trouble which afflicts the patient, is the occurrence of muscular pains, lightning-like in character. They occur in the initial stage, as I have said, are shooting, and are usually noted in the extremities. There is frequently associated with this pain a sense of constriction in the part, a binding feeling like pressure, and it is very usual for this condition to be mistaken for rheumatism. It might last for years, and the patient telling you that he was rheumatic, and you, accepting his say so without further investigation, might suppose the pain to be due to rheumatism or neuritis, when in reality it was due to a commencing locomotor ataxia. We make inquiry about this symptom in this case, and find that it is wanting. The man says that he occasionally has some pain in his back and some uneasiness about his limbs, but no marked shooting pains. The absence of this sign tends to negative the idea of locomotor ataxia, but it is not proof positive that the disease does not exist; while it is most usually present, yet it is not always so. As the disease progresses, we will have anæsthesia of the sole of the foot and disorder of muscular motion, but these characteristic symptoms have not yet become manifest in this case. It is still in the first stage, and the history which the man gives us, as well as the signs which we are able to elicit, correspond very clearly with the history of the early stage of locomotor ataxia in every particular, save that of the absence of muscular pain, which I must admit is a strongly negative sign. In the course of some months, it may be a year or two, according to the rapidity with which the disease progresses, we will have the knee-jerk completely abolished, we will most likely have the muscular pain and the other characteristic symptoms. Well, now, then, we have to do with a case in its incipiency, when the symptoms referable to the sexual system are marked; later these symptoms will be wanting.

Having a case thus early in the disease, what can we do for it? I would call this a favorable case for treatment; the man is in good condition, the morbid process has but just commenced, and altogether I would feel that we had good reasons to hope that we may be able to cure, or at least check, the progress of the disease. It is of the utmost importance that these patients should rigidly and persistently carry out our instructions for a long time; it will be idle to attempt to relieve such a case by spasmodic or intermittent



medication ; the effort must be earnest and prolonged or it will be useless. This fact should be earnestly impressed upon the patient, for, as a rule, when prolonged treatment is necessary in any case, it becomes irksome and the patient rebels against it and will not persevere, save in very exceptional instances. However, if you explain the necessity of perseverance, if you tell the patient that you can do him no good unless he strictly follows your directions, then you have placed the responsibility of failure where it rightly belongs, and your conscience will be clear. Promising, then, that persistent treatment alone can be expected to do any good, we ask what drugs are calculated to be beneficial in such cases ; what group of drugs are indicated in the initial stage of locomotor ataxi ? What are known as the metallic tonics, so to speak, are the drugs that we will derive the most from.

Prominently among this class I would place nitrate of silver, which, when persistently used, is eminently calculated to cure, or, as I have said, at least to control the progress of the disease. So I would also mention chloride of gold and sodium, which I would think at least as efficacious as nitrate of silver, if not more so. Now, a very important question in the therapeutics of the disease arises. You are probably aware that syphilis is a very common cause of locomotor ataxia ; indeed, some authorities go so far as to say that the disease is always caused by syphilis. This question has been much debated, and it would seem, as some suppose, that while the disease is not directly caused by syphilis, yet it is, so to speak, evolved from it, if you catch my meaning. That is to say, that while locomotor ataxia is not a symptom of active, acute syphilis, yet the specific affection may cause such changes in the nervous system as to favor the development of the disease, so that while the disease, to repeat, may not be the direct result of it, it is yet induced or favored by syphilis, which must be recognized as a potent factor in very many cases of the disease. Therefore, we must, of course, perceive that this question will have an important bearing on our therapeutics. If we know that there be a specific taint, and especially if the disease be of recent date, it is obvious that we would resort to iodide of potassium. In this case we can get no direct history of syphilis that would cause us to assign to it a causative influence, but I would say, in general terms, that when you suspect the existence

of a specific influence, it would be good therapeutics to use the iodide of potassium.

In this case, as we have no reason to suspect syphilis, I will order the nitrate of silver in pill form. You know that this drug has the property of accumulating in the system when used for a long time, and producing very unpleasant results thereby, among which I might prominently mention the characteristic discoloration of the skin; yet, that it may do good, it must be used for a long time; hence, I will give you some directions, by the observance of which its use may be long continued without any deleterious effects. The patient should take it continuously for six weeks and then suspend its use, being then thoroughly purged, and other measures resorted to in order that the accumulated drug may be removed from his body by means of the excretory organs. After an interval of two weeks he should recommence the drug, continue it again for six weeks, suspend it, eliminate it as before, and so on. By thus cautiously handling the drug, its use may be persisted in for so long even as two years, but do not forget that all this caution is imperatively needed. Have we, then, anything else that will do good? Yes. The electric brush has been highly lauded by some authorities, and I am quite well satisfied that its use will be frequently productive of very good results. The electric brush means the application of faradism to the whole surface of the body; the patient may stand with his feet on a metal plate, and the poles be applied to every portion of the surface of the body from the top of his head to the soles of his feet; it must be thus thoroughly applied or it will do no good. Some authorities claim that they have succeeded in arresting the disease in very many cases by the use of the electric brush alone, without any other remedies. Whether this is really true or not I am not prepared to positively state, though a comparatively small amount of positive evidence in this, as in any other direction, will outweigh a much greater amount of negative evidence, and I am quite sure that its effects are sufficiently good to warrant us in giving it a very thorough trial in every case that we have to treat.

Electricity is a remarkable remedy in all disordered conditions of the nervous system, and it is a remedy, the great importance of which I fear has not hitherto been properly appreciated. The field of its applicability is a very vast one, and I am quite sure that in the near future we will see

it in much more common use in general practice than it is at present. Now, how shall we use the electricity in this case? It is a very common mistake that is made by the general practitioner who has not an intimate acquaintance with this valuable therapeutic resource, to use it in too strong quantities, and thus, instead of doing good, he really injures his patient. I would lay down the rule that it should be used in such quantity only as will produce a pleasant sensation, an agreeable titillation. The very strong current, as I have said, and I repeat it, because you should remember it, will prove injurious, while, if you use the weak current, affecting only the skin, that is, directly acting on only the skin, and not producing pain, but only pleasant feelings, and if you keep this application up, you will surely do good. Well, now, what else will we do?

The electric brush and the nitrate of silver will be our mainstays; with them we will hope to do the most, but we will, of course, have some collateral indications to take into account. Of these I would consider the first and most important to be rest. Some authorities say that the patient should be kept in bed for a month or more at a time. While I say they should have rest, yet I believe in a certain amount of exercise, but we must be very careful that this is not carried to a point of fatigue, for then it will prove very injurious. I would say that when we get hold of a case early in its course, we can do a great deal to ameliorate its severity by rest alone. As I said, a few minutes ago, about electricity, so I would say of rest, it is a therapeutic resource of wonderful potency, one that is not properly appreciated by the profession, and one that I am quite sure will be more generally resorted to when its importance is rightly appreciated than it is to-day.

But we can hope for but little from rest unless we pay attention at the same time to the patient's diet. We would make a great mistake, as you can plainly see, if we were to allow the patient to consume his equal quantity and quality of food, that which he was accustomed to take when leading an active life, and yet at the same time keep him on his back in bed; we would soon derange his stomach and his assimilative functions, we would soon overload his system with unnecessary aliment, and would thus, evidently, do more harm than good. We well know that if a man leads a sedentary life, and does not regulate his diet in accordance therewith, he will suffer in consequence. Nature's law

regulating the supply can not be infringed with impunity. Therefore, when we enjoin rest, we must caution the man to be very careful not to eat to excess, and indeed the diet must be materially reduced. From each individual case we must draw the indications for the kind of restriction we will impose upon the diet. If the patient suffers from indigestion at all, we must inquire into his nature and expel from the dietary the offending articles. Thus, if he has acid indigestion, we must exclude the fats, which, by fermentation, generate butyric acid; and so on, for each class of foods, we must study the special indications that each case presents.

Thus, you see, in conclusion, that it has been from an aggregation of small, and many of them apparently irrelevant symptoms, that we have reached the conclusion that this man is suffering from incipient locomotor ataxia, and it is from a combination of apparently small methods, such as diet and exercise and rest, combined with the electricity and silver, that we hope to benefit him.—*Peoria Medical Monthly*.

---

### Removal of the Uterus per Vaginam; Removal of the Ovaries; Irregular Menstruation; Dysmenorrhœa; Convulsions.

---

BY WILLIAM GOODELL, M. D.,

Professor of Gynæcology at the University of Pennsylvania.

---

Delivered at the Hospital of the University of Pennsylvania.

GENTLEMEN: The first case which I bring before you is the woman from whom I removed the uterus by the vaginal operation two weeks ago. You will recall the fact that there was hypertrophic elongation of the supravaginal portion of the cervix, and that the lower portion of the neck had undergone epitheliomatous degeneration. The os was outside of the vulva, while the fundus was high in the pelvis. My intention was to remove the epithelioma, as far as was possible, with scissors and knife, but, in doing so, I opened the peritoneal cavity. As the womb was movable, it was then decided to remove it wholly, and this was accomplished without special difficulty.

Since the operation, the patient has done perfectly well,



the temperature only once reaching  $100.5^{\circ}$  Fahr. In all these cases the question arises whether to insert a drainage-tube or depend upon the ligatures for drainage. I concluded to adopt the latter plan. The vagina was lightly stuffed with corrosive sublimate cotton, which was changed twice a day. The vagina was also syringed twice a day. I shall now remove the sutures, and, as can be seen, union is perfect.

In regard to the removal of the uterus per vaginam, I am not prepared to express an opinion. In this instance, on account of the prolapse and the mobility of the uterus, the operation was not difficult. When, however, the operation is performed on a woman advanced in life, in whom the vagina is small, it becomes one of considerable difficulty. The womb has to be dragged down, and the broad ligaments are so short, that there is danger of the slipping of the ligature. There is also danger of including some important part in the ligature. The ureter has been twice included in twenty-seven operations. Both of these cases resulted fatally. This is still a young operation, and, while successful in the hands of two or three operators, it is very unsuccessful in the hands of most surgeons. This operation is not suited to those cases in which the womb is fixed, and it is extremely rare for me to see these cases of epithelioma of the cervix, until the disease, or the inflammatory processes resulting from it, have involved the adjacent tissues.

Let me call attention to the fact that the prolapse of the vagina has entirely disappeared. The parts which, at the time of operation were external, are now drawn so high that I have some difficulty in reaching the sutures. We shall keep this patient under observation and see how long she is free from disease.

*Removal of the Ovaries.*—Here is a patient who was operated on two weeks ago for the removal of the right ovary, and, as the left ovary was also diseased, it too was removed. There has been a little skin abscess in the line of the incision. This I attribute to the use of the pressure forceps. These little abscesses occur more commonly in fat women than in others. Since the operation the patient has not complained of pain, which before the operation was a marked symptom.

I shall now have the patient removed, and show you some of the material removed from the tumor. It is colloid in character, which excites a suspicion that the disease is ma-

lignant. The presence of pain is also a suspicious sign, for in ovarian cysts pain is not often complained of. We shall, therefore, keep this patient also under careful observation.

I have here the ovaries removed from a patient who fifteen months ago had a miscarriage which I believe was a natural one. Since then she has had great pain in the ovaries, especially the left one. We find pain referred to the left ovary more frequently than to the right. I am unable to give any satisfactory explanation for this, unless it is due to the proximity of the rectum, or to the anatomical peculiarity that the left ovarian vein empties into the renal vein. The ovaries were enlarged and exceeding tender, and after treating her in various ways, I came to the conclusion that the only thing to be done was to remove the ovaries. I operated yesterday. As you see, the ovaries are much enlarged, and are the seat of cystic degeneration. These little cysts, by making pressure on the sensitive nerves, caused the pain. There is, in conjunction with the cystic degeneration, parenchymatous degeneration. Since the ovaries were removed, although the operation was done only yesterday, she has lost the original pain.

I also operated yesterday for the removal of the ovaries in a case of peritonitis. Some time ago the patient attempted to produce an abortion. The result was a severe peritonitis, followed, after a time, by marked hysterical symptoms, including paraplegia. After treating her for some time without much improvement, removal of the ovaries was decided upon. I operated yesterday, but did not succeed in removing the ovaries. The parts had become so matted together, as a result of the inflammation, that it was impossible to distinguish one organ from another. I thought that to persist with the operation would be more likely to cause the death of the patient than to result in her restoration to health. I hope, however, that the operation will be of service through its mental effect and through the breaking up of some adhesions.

I have here the ovaries removed from an epileptic. The attacks revolved around the menstrual periods. She finally got into such a condition that death was preferable to life under such circumstances, and both she and her husband begged me to remove the ovaries. Learning the history of the case, I decided that this should be done as a last resort. When this disease is present, I am not sure that removal of the ovaries or the testicles to stamp out the disease and pre-

vent it from being transmitted would not be a justifiable operation. The ovaries were removed in this case. One is larger than it should be, and the other presents a cyst. The oviducts were also enlarged and filled with fluids, but these have not yet been examined. What the result of the operation will be in this case, there has not yet been time to determine.

I have repeatedly had physicians send me patients with the request that I remove the ovaries, and I have seen these patients get well under the rest-treatment, with massage, etc. ; put to bed, given proper food to fatten them and medicine to strengthen them. Let me explain how this treatment does good. I have repeatedly told you that where we have nerve exhaustion we have irregular circulation. As a result, certain organs receive too much blood, while others do not receive enough. During menstrual life the ovaries are the most exacting organs in the body. The sensitiveness of the ovaries surpasses even that of the perineum. The Scriptures allude to the "apple of the eye" as the most sensitive part of the body, but the eye will stand a cut or puncture, while, even under ether, a cut or puncture of the perineum will cause flinching. The sensitiveness of the ovaries exceeds even this. The inflamed ovary can not be touched in the slightest way without causing great pain. Since these exacting organs invite blood to themselves, we find that when there is loss of control of the circulation they receive too much blood, and, as a result, they become turgid, heavy, sink down, often prolapse, and in this way we get the ovarian pain. If we relieve the disturbance of circulation, if we equalize the circulation and attract the blood to other organs, or allure it to the periphery by means of massage and electricity, we remove the oversupply of blood, and the ovaries become relieved. I have seen numerous cases of recovery where the ovaries were not only prolapsed but exceedingly tender. Where patients can afford to rest and submit to treatment which is expensive, it is well to begin the treatment in this way, but when a poor woman, who can not afford to give up her work, comes to you, you are warranted in removing the ovaries rather than submitting her to a plan of protracted treatment which is largely experimental.

*Irregular Menstruation, Dysmenorrhœa, Convulsions.*—This patient is eighteen years of age, and single. Puberty oc-

curred at the age of fifteen. Shortly afterward the menses became menorrhagic. They are now of normal quantity, but appear only every four or five months. For the past two years she has had epileptiform convulsions and dysmenorrhœa. These spasms occur about the menstrual periods, and when they take place near the time for menstruation, the menses do not appear.

It is sometimes a difficult matter to decide whether a patient is suffering from hysterical or from epileptic convulsions. There are, however, certain little points which to me serve as landmarks. When a patient bites the tongue, I should say that, as a rule, it is a case of true epilepsy. In epilepsy they usually froth at the mouth, but do not do so in hysteria. If the eyelids are tremulous during the convulsion, I feel very confident that it is a case of hysteria. Again, in hysteria the patient usually begins with very marked nervous manifestations, whereas in epilepsy the attack usually comes on without warning. In epilepsy there may also be an aura.

In this patient, then, we have irregular menstruation with dysmenorrhœa. The indications for treatment are to make the menses regular and to relieve the dysmenorrhœa. The painful menstruation appears to have no effect upon the convulsions. She came to the hospital for the purpose of having the cervix dilated, and I should have performed the operation if I had known that she was coming. As it is, I have not my instruments with me, and the operation will have to be postponed.

It is a general impression that a woman is ill because her menses do not appear. This is not so. The menses do not appear because she is not well. The absence of menstruation is simply one of the phenomena indicating ill health. This patient's blood needs improving. Taking it all in all, I think that Bland's pills fulfill the indications better than anything else. I also like the use of arsenic. I shall, however, not use the arsenic in this case, as the patient will not be under observation. I shall order the following:

R<sub>y</sub>. Ferri sulphatis exsiccati.

Potassi carb. puræ . . . . . aa ʒij.

M. et ft. pil. No. xlviij.

The original prescription directs that the pill shall be made with gum tragacanth and sugar, but this is said to be a difficult way of making the pills, and I therefore leave the selec-



tion of the excipient to the apothecary. Mucilage of gum arabic is often used, but this is incompatible with iron, causing a precipitate, and, further, a pill made with gum arabic is liable to become exceedingly hard and only soluble to a slight extent. Glucose answers the purpose better than anything else. It is said that a double decomposition with the formation of carbonate of iron and sulphate of potassium takes place in this pill. It may in the stomach, but if glucose is added, this decomposition can not take place outside of the body.

We shall order the pills to be taken in the following manner: To begin, she will for three days take one pill after each meal. On the fourth day she will take four pills, two after breakfast, and one after the other meals. On the fifth day she will take five pills, two after breakfast and dinner, and one after supper. On the sixth day she will take six pills, two after each meal. She will then continue for a week taking six pills a day. After that she must increase by one pill a day until she takes nine pills a day. These she will continue, and report in one month. The only inconvenience that is liable to result from the use of these large doses is a fullness in the head. If this should occur, the patient will lessen the dose for a day or two. This is one of the best remedies in amenorrhœa. As I have said, arsenic is a useful remedy. Fowler's solution may be given with the syrup of the iodide of iron, in the proportion of one part of the former to nine of the latter. Of this, ten drops may be given after each meal, and gradually increased to thirty drops. While this does not injure the teeth, it is apt to discolor them temporarily.—*Med Bulletin.*

---

## Microscopy.

---

### Classification of Bacteria.

---

AN exchange contains the first of a series of Bacteriological Notes by Dr. George M. Sternberg, U. S. A. The author begins his remarks by calling attention to the advances made in this line of work since the introduction of the valuable "plate method" for cultivation and isolation of bacteria, suggested by the eminent savant, Dr. Koch, of Berlin.

There is no doubt but that this most ingenious device has had more influence in placing bacteriological research upon a strictly scientific basis, than any, or all of the methods heretofore adopted. By it, we are liberated in a great measure from the former absolute slavery to precautions that the old methods of cultivation in fluid media necessitated. Its advantages are, that we are by it possessed of the power to isolate from a mass containing any number of different organisms, each representative in a pure culture. The principle involved is simply that if a mass containing a variety of different species of bacteria be introduced into a liquefied media which has the property of becoming solid when poured upon a sterilized glass plate, that these organisms will, by the increase of surface thus covered, disseminate themselves over a greater or less area, and become separated the one from the other. Each bacterium will act as a centre of growth for its individual colony, and in this way we are enabled to distinguish the organism that grows in one characteristic way for that one which grows after a different fashion. By introducing a minute portion of these very small colonies into tubes containing sterilized media we have at command a means of isolating from the former heterogeneous mass, each of its constituents as a pure colony or culture.

We have now but little confidence in the published results of the old methods of cultivation in fluid media, for it is evident that when a fluid culture became contaminated by some foreign organism, the only hope of the detection of its presence was in its recognition upon morphological characteristics. Morphological differences are in most cases sufficient to enable us to distinguish between a spherical organism and a rod-shaped organism, but if we have a fluid culture of a spherical organism contaminated by the presence of another spherical organism, the difficulties, in fact the impossibility of separating them is plainly apparent. So that where recourse was had only to the fluid media for cultivation we feel justified in expressing considerable skepticism upon the accuracy of many of these results. Admitting that by microscopic examination we could differentiate between the organisms with which we were working and the foreigner who had intruded himself, there were no reliable means devised for again obtaining the original organism pure.

Dr. Sternberg next gives a brief résumé of the classifications of bacteria. He mentions especially that of Cohn and that of Zopf, giving a preference to the latter as being prefer-

able to the former as a working classification, although here he thinks it open to objections. We fail to find any mention whatever of the arrangement suggested by Hueppe. This latter classification is a natural one and has met with such favor as to merit adoption by some of the most prominent workers in this field, especially the German investigators. As a working classification we deem it of sufficient value to merit consideration, and take the liberty of giving it as suggested.

It will be seen that he divides micro-organisms into three grand divisions, and each division is sub-divided into its several genera.

#### Natural Classification of Hueppe.

- |                           |   |  |
|---------------------------|---|--|
| (1.) <i>Coccus forms.</i> | { | a.—division into pairs— <i>diplococci</i> .                        |
| Genera                    | { | b.— “ “ chains— <i>streptococci</i> .                              |
|                           | { | c.— “ “ clumps— <i>staphylococci</i> .                             |
|                           | { | d.— “ “ fours— <i>tetrads</i> .                                    |
|                           | { | e.— “ “ eights— <i>sarcinae</i> .                                  |
| (2.) <i>Rod forms.</i>    | { | a.—forming endo-spores without change of shape— <i>bacilli</i> .   |
| Genera                    | { | b.—forming endo-spores with change of shape— <i>claustridium</i> . |
|                           | { | c.—forming arthro-spores— <i>arthro-bacteria</i> .                 |
| (3.) <i>Spiral forms</i>  | { | a.—forming arthro-spores— <i>Spirochete</i> .                      |
| Genera                    | { | b.— “ endo-spores with change of shape— <i>vibrios</i> .           |
|                           | { | c.— “ “ without change of shape— <i>spirillum</i> .                |

The convenience of such a classification to the working bacteriologist is apparent at a glance. It is rarely or never that an organism is met with that can not be classified under the above divisions, and may further be placed into its natural place as a genus of that division.

The balance of this section the author devotes to discussing the question—whether the organisms, now known as pathogenic, have from the first possessed this disease producing power, or have they acquired it after development under peculiar circumstances?

He concludes that it would be premature in the present state of our knowledge on this subject, to advance a positive answer to either of these queries, but cites instances that might be taken as evidence favoring such hypothesis. In support of the former query he calls our attention to the tenacity with which an organism, known to be pathogenic, will retain its disease-producing property even when carried through generation after generation. As evidence for the latter question he cites the alterations that are seen to take place in the degree of virulence of pathogenic organism when

subjected to the different methods of attenuation which are at present claiming much of our attention.

The author then endeavors to point out the confusion that occasionally arises as a result of the different classifications. He cites the cases of the microbes of fowl cholera and of rabbit septicæmia, each of which we meet described by one author as a micrococcus and by another as a bacillus. It, however, illustrates less the difficulties arising from the classifications than from an incorrect interpretation of what is seen by the aid of the microscope. This is a discrepancy that will continue to exist until morphological are abandoned for physiological characteristics. It is now accepted that in order to indentify an organism, not only its morphological description as accurately as is possible to give it, but the appearance of its growth and its behavior under all the artificial circumstances at our command should be directly described. In referring to the stability of the pathogenic power possessed by an organism he proceeds: "In general we may say that the experimental evidence relating to the infectious diseases of the lower animals gives no support to the supposition that harmless microorganisms may acquire pathogenic power, within a brief time, as a result of exceptional circumstances in their environment. On the other hand, we have evidence that many pathogenic organisms are widely distributed in nature, and as their abundant multiplication must depend upon conditions relating to their supply of pabulum, etc., their pathogenic power is one of their fixed physiological characters. But we have also experimental evidence which shows that this pathogenic power is subject to modifications. According to Pasteur, cultures of the microbe of fowl cholera, when kept for two or three months, become attenuated as regards their virulence. That pathogenic organisms may undergo such an alteration in nature's laboratory is quite probable, but this the author considers as entirely a different matter from the *de novo* acquisition of pathogenic power. He cites in support of this view the difference in the degree of virulence seen in epidemics of the same disease occurring at different times, the severity of the malady usually increasing somewhat after the epidemic has fairly begun, the first cases usually being of rather a milder form. If these epidemics are due to a micro-organism, the only ground upon which he can account for this difference in virulence is, that the organisms have by some surrounding circumstances become deprived of a portion of the disease-producing



property and their former virulence is only restored after they have run their course for a time through the living system. That an organism may under certain circumstances lose some of its disease-producing power gives us no grounds upon which we are at liberty to suppose that the reverse may be the case: that a harmless organism can acquire disease-producing properties."—*Maryland Medical Journal*.

---

## Book Notices

---

MEDICAL AND SURGICAL DIRECTORY OF THE UNITED STATES, Comprising a List of Physicians and Surgeons, Arranged by States, with School Practiced, Post-Office Address, Population and Location, Date and College of Graduation; all the Existing and Extinct Medical Colleges of the United States and Canada, with Locations, Officers, Number of Professors, Lecturers, Demonstrators, etc.; the Various Medical Societies, Hospitals, Sanitariums, Asylums, Boards of Health, Synopsis of the Laws of Registrations and other Laws Relating to the Profession of Each State, Medical Journals with Names of Editors, Official List of Officers of the Medical Departments of the U. S. Army, Navy and Marine Hospital Service, etc. List of all the Physicians in the United States, Arranged Alphabetically. 8vo. Pp. 1,455. Complete in One Volume, Cloth. Price, \$7.00. Detroit: R. S. Polk & Co., 1886.

We have reason to believe that the Directory before us is correct. A few years ago a similar one was published in Philadelphia, but it was so filled with errors as to be quite worthless. It contained the names of not a few physicians that we knew had been dead ten years before the book was issued; and, in the case of many living physicians, a post office address was given which they had not had for several years previous to the appearance of the work. A directory that is not generally correct, is not only useless, but is a source of annoyance.

It must be evident to every one that a correct Directory of physicians of the whole country, embodying information in regard to medical colleges, state, county and municipal societies; and other information, is a much needed work.

The Messrs. R. L. Polk & Co., impressed with this fact, at the expense of great labor and the outlay of considerable money have compiled the present work.

The collection of the names and addresses, the publishers state, was a mammoth undertaking. Special agents were sent to all the cities; letters were written to every postal point too small to visit personally, and correspondence was opened with the secretary of every medical society in the Union whose address could be obtained. After the names had been collected and arranged by States, every individual whose name had been procured, was either called upon or addressed through the mails and requested to supply information in regard to graduation. After the returns came in, it was found that between thirty and forty thousand physicians whose names had been procured, had died or moved away, and could not be found by the postal authorities. When information could not be procured from the physician himself, it was sought from other sources.

Means were employed involving immense labor and great trouble, to prevent being imposed upon by doctors with false information. It was found in many instances that parties would represent themselves as graduates who were not. To avoid imposition in consequence, the name of every alleged graduate was checked with the official records of the college from which he or she claimed to have a diploma. It required the work of nearly thirty correspondents and compilers for four months to secure copies of the records, to make the comparisons, and to correct the discrepancies, which numbered up into the thousands. In every case of this sort, explanations were asked by mail of both the self-styled graduate and the college. Except in very few cases replies were received only from the college, and these almost invariably confirmed the suspicions already aroused.

The publishers state that nearly *three hundred thousand letters* were written to either secure or verify information, and that the amount of money spent for postage alone in this vast correspondence, was nearly ten thousand dollars.

The 1,455 pages contain the names of nearly 80,000 persons practicing medicine in the United States and the Territories. These are arranged alphabetically by state, city and post-office. Each name is accompanied by all the information attainable regarding place and time of graduation. Each State, previous to the list of names of the medical men belonging to it, has an article appended descriptive of its

climate, soil, productions, prevailing diseases, rate of mortality, etc. In addition to this complete directory, the 80,000 names are repeated without addresses, arranged alphabetically, accompanied only by figures, whereby the reader can readily find each name in its appropriate place in the directory proper. This list will prove of great value, as it will enable one to find the location of physicians who have removed and their whereabouts are unknown. As the publishers say, it will doubtless bring many old friends into communication who have lost track of one another since graduation, and, possibly, in some cases, discover the whereabouts of others who would prefer to remain concealed.

We have given the work the lengthy notice we have, for the reason that we believe the publishers deserve it. To accommodate the profession in the way of preparing an accurate and reliable directory, they have incurred great expense and taken upon themselves immense labor. They should be rewarded by a large sale. We do not expect that every physician will provide himself with a copy of the work, and yet there is scarcely one who, if he had a copy, but that would find daily use for it in consulting its pages in regard to some of the thousand topics upon which it gives information.

---

ANALYSIS OF THE URINE, WITH SPECIAL REFERENCE TO THE DISEASES OF THE GENITO-URINARY ORGANS. By K. B. Hoffmann, Professor in the University of Graz; and R. Ultzmann, Docent in the University of Vienna. Translated by T. Barton Brune, A. M., M. D., Late Professor of the Practice of Medicine in the Baltimore Polyclinic and Post-Graduate Medical School, etc., and H. Holbrook Curtis, Ph. B., M. D., Fellow of the New York Academy of Medicine. Second Edition, Revised and Enlarged. 8vo. Pp. 310; Cloth. Price, \$2.00. New York: D. Appleton & Co.; Cincinnati: R. Clarke & Co., 1886.

This work has now reached its second edition in this country; and, besides enjoying a large degree of popularity in Germany and Austria, it has been translated into three languages. As is manifest by its size and title-page, the book does not pretend to be an elaborate and exhaustive treatise on diseases of the genito-urinary organs, but it

presents, in a concise form, many most valuable suggestions and practical hints, both as regards analysis and diagnosis. It contains all that is necessary for the student and physician to know to properly analyze the urine for the purpose of ascertaining what changes disease has effected in it, and to trace from the results what may be portended.

This American translation is accompanied with a preface by the authors, in which they state that, in eliminating all unnecessary matter, they have endeavored to make their processes so simple that but a limited knowledge of chemistry will be necessary to understand their tests.

We noticed, only a few months ago, this work on "Analysis of the Urine" by K. B. Hoffmann and R. Ultzmann, translated by Prof. F. Forchheimer, M. D., of Cincinnati, Professor in the Medical College of Ohio, and published by Woodruff & Co. Drs. Brune and Curtis stigmatize Dr. Forchheimer's translation as unauthorized, while they assert that theirs is by the consent of the authors. We presume that Dr. Forchheimer's translation is unauthorized, in the sense that hundreds of other American publications of the writings of European authors are that have been made without permission of the authors.

---

A MANUAL OF PRACTICAL THERAPEUTICS, CONSIDERED WITH REFERENCE TO ARTICLES OF THE MATERIA MEDICA. By Edward John Waring, C. I. E., M. D., Fellow of the Royal College of Physicians, Lond., etc. Edited by Dudley W. Buxton, M. D., B. S., Lond., F. R. C. P., etc. Fourth Edition. 12 mo. Pp. 740. Cloth, price, \$3.00; Leather, \$3.50. Philadelphia: P. Blakiston, Son & Co.; Cincinnati: R. Clarke & Co., 1886.

We do not know of a work better adapted than the one before us, for the use of students engaged in the study of materia medica and therapeutics; and we feel quite sure that it will be very popular with them. With every topic which it considers, it is full and complete in its treatment, and yet it is not prolix. Avoiding unnecessary verbiage, it presents the student all the important and recognized facts of the subjects discussed, and emphasizes such as should be especially kept in mind. For instance, the author, in treating of diseases generally, improves the opportunity to impress the fact that in no two cases will a disease reveal itself in quite the same way, and that consequently there necessarily



follows the corollary, that in no two cases can the treatment be pursued upon precisely similar lines. He illustrates this by showing that, while in *pneumonia*, cases are now and then found in which a depletory, rather than a stimulant, treatment promises the best chance of ultimate recovery; yet, oftentimes, cases will be met with in which an opposite course of treatment will have to be instituted to save life—active stimulation being necessary from the beginning. It is thus shown that it is highly dangerous for a physician to treat a disease in accordance with its name, adhering to one line of treatment in all cases of this same disease in the teeth of symptoms which should contraindicate it.

The work contains an index of diseases, with a list of the medicines applicable as remedies, and a full index of the medicines and preparations used in it. The plan of the work is certainly the best that could have been instituted for the convenience of student and practitioner.

The present edition, the fourth, has been thoroughly revised, and in great part rewritten. Much care has been employed to include all the vast array of new remedies, and to retain, in every respect, the eminently practical character of the manual which has brought so much success to the former editions. There are a number of features which render it especially valuable—features of arrangement and contents not found in similar works, that have made the former editions successful.

---

#### BRIGHT'S DISEASE AND ALLIED AFFECTIONS OF THE KIDNEYS.

By Charles W. Purdy, M. D., Queen's University, Professor of Genito-Urinary and Renal Diseases in the Chicago Polyclinic, etc. 8vo. Pp. 288, with eighteen illustrations. Cloth, price \$2. Philadelphia: Lea Brothers & Co.; Cincinnati; R. Clarke & Co., 1886.

The object of this work is to furnish a systematic, practical and concise description of the pathology and treatment of the chief organic diseases of the kidneys associated with albuminuria, which shall represent the most recent advances in our knowledge on these subjects.

Bright's disease seems to be unusually prevalent at the present time; and instead of a physician only occasionally meeting with a case, cases come under his care not unfrequently. Though works upon many other affections [are numerous, and new ones are constantly making their ap-

pearance, yet the literature upon diseases of the kidneys is comparatively limited; and especially is it limited in the case of Bright's Disease and the allied affections. A new work, therefore, upon these subjects can not help but attract considerable attention.

The work of Dr. Purdy, in its nine chapters, treats of Albuminuria, Uræmia, Acute Nephritis, Chronic Nephritis, Cirrhosis of the Kidney, Scarlatinal Nephritis, Puerperal Nephritis, Lardaceous Degeneration of the Kidneys, Cyanotic Induration of the Kidney.

The author in his treatment of the affections of the kidneys, to which his work is devoted, displays learning, research and study. Each disease is discussed in a scientific manner; the etiology being first set forth—the exciting and predisposing causes receiving attention; after which is described the pathology or morbid anatomy; then follows a description of the symptoms; the signs involved in the diagnosis and prognosis; and finally is presented the treatment.

While the author, in his treatment of the various subjects, shows that his work is not a mere compilation, that much which he presents is the result of his own observation and study, yet he gives the views of other investigators upon important points, and especially when his own researches seemed to need supplementing. The work, in fact, can be regarded as exhibiting the latest and most approved views of the profession on the subject of Bright's disease and allied affections.

From the increased interest which is being taken in Bright's disease by the profession, the work of Dr. Purdy will undoubtedly be much sought for; and we are confident it will be esteemed as exceedingly satisfactory in its exposition of the pathology of affections in which the presence of albumin is a characteristic feature, and in the treatment recommended. It will be found to clear up and make intelligible not a few obscure phenomena which are now and then observed. For instance, it mentions the fact that Senator, and some others, are of the opinion that the urine, as it leaves the renal glomeruli, is always "feebly albuminous," and that the greater part is subsequently absorbed by the epithelium of the convoluted tubes during its passage through the latter. Consequently, it is suggested that this fact, if it should be confirmed as such, will explain the occasional appearance of albumin in the urine of comparatively

healthy people; for it is readily conceivable that the conditions of filtration which normally only allow traces of albumin to pass out from the vessels of the tuft, may be easily disturbed and permit its filtration in quantities readily perceptible, even by means of the coarser tests. We have ourselves, a number of times, found it difficult to explain the presence of albumin, in considerable quantities, in the urine of persons apparently in tolerable health.

---

DISEASES OF THE STOMACH AND INTESTINES. A Manual of Clinical Therapeutics for the Student and Practitioner. By Prof. Dujardin Beaumetz, Physician to the Cochin Hospital, Member of the Academy of Medicine and of the Council of Hygiene and Salubrity of the Seine, etc. Translated from the Fourth French Edition by E. P. Hurd, M. D., President of the Essex North District Medical Society, etc. With Illustrations and one Chromo-Lithograph. 8vo. Pp. 389. Cloth. New York: Wm. Wood & Co.; Cincinnati: Garfield.

This work belongs to the series of "Wood's Library of Standard Medical Authors."

The translator states that this volume may be considered by American readers as the continuation of the work on "Clinical Therapeutics," published last year by G. S. Davis, of Detroit. It seems that the author prepared, for the French profession, a work in three volumes entitled, "*Lecours de Clinique Therapeutique*," as follows: Vol. I., On the Treatment of Diseases of the Heart, Aorta, Stomach and Intestines. Vol. II., On the Treatment of Diseases of the Liver, Kidneys, Lungs, Pleura, Larynx and Pharynx. Vol. III., On the Treatment of the Diseases of the Nervous System, General Diseases and Fevers.

The volume published by Mr. Davis, entitled "Clinical Therapeutics," is the third and last volume of Dujardin Beaumetz's work, *Lecours de Clinique Therapeutique*, while the present one is the first volume, with the omission of the first part devoted to Diseases of the Heart and Aorta.

The volume before us, although entitled Diseases of the Stomach and Intestines, is far less a treatise on the pathology of those affections than on the treatment, to which, in fact, all other considerations are made subordinate. Much attention is given to foods and alimentation—the author being of the opinion that a cure will often be brought about more

surely by the observance of a strict and well-regulated diet, than by the administration of drugs. The reader, in fact, can not fail to remark the large place that is assigned to hygiene as a method of cure. The utility and necessity of pure air, of suitable exercise, of a proper dietary regimen, etc., are everywhere insisted upon, and emphasis is put upon Bouchardat's declaration that etiology is as indispensable to therapeutics as is hygiene or the administration of medicines. We do not know of a work which presents so full, complete and satisfactory a method of treating diseases of the stomach and intestines by hygienic therapeutics and by alimentation, as does this one. It must not be supposed, however, that drugs are discarded, for such is not the fact. But as a very large proportion of the diseases, to which the treatise is devoted, is caused by improper alimentation and bad hygienic conditions, it is the object of the author to found a treatment based upon the cause.

---

## Editorial.

---

ROYAL LUNATICS.—Our readers are acquainted with the particulars of the suicide by drowning of King Louis, of Bavaria. No one felt any sorrow in consequence of the death of the royal fool, but all lament the decease of the distinguished physician who lost his life in endeavoring to save that of the crowned imbecile. King Otto is another miserable, disgusting royal lunatic. A few days ago it was stated that, about the time Kaiser William, the Emperor of Germany, visited Munich, Otto fancied himself a bird, and went about hopping on one foot, trying to imitate the sounds of a bird by whistling, and making efforts to fly by flapping his elbows against his sides. In the evening he made a large nest in one of the rooms of his palace, with straw and dried twigs, and sat in it all night.

Nearly all of the members of the royal families of Europe are intellectually feeble in consequence of the vicious indulgences of their ancestors and of themselves, and through intermarriages. We have not the space to describe in detail the rulers of England, but those who are familiar with their history know that nearly every one has given evidence of an unbalanced mind. James I., who has been lauded so greatly by many, and with whom the crowns of England



and Scotland were united, was below mediocrity in common sense, mean and groveling, shockingly coarse and sensual in character. The royal families of Spain, and those of the other countries of Europe, are more remarkable for the disposition to crime of their members than for any other trait. But few who have sat upon the thrones of Europe have shown that they possessed mental endowments equal to those of the average man. Those whose names are distinguished in history owe to their ministers their celebrity. In fact, the crowned heads of Europe afford most deplorable examples of the terrible effects upon the intellectual faculties and the moral sensibilities of vicious indulgences.

The New York *Medical Record*, of June, contains an article entitled "Mad Kings," from which we clip the paragraph below, as we find that it expresses the same views which we have been endeavoring to set forth. By making the quotation, we will save ourself the labor of recounting the facts we were purposing to do. Our attention was called to the article just as we had completed the last paragraph above: "In the Claudian-Julian family, beginning with Julius Cæsar himself, and ending with Nero, we have an almost unbroken line of neuroses. Cæsar himself was epileptic, but probably the disease developed late in life, from exposure and excesses, and did not much affect his health.

"Augustus, his grand-nephew, had, it is believed, writers' cramp; Julia, his daughter, seems to have been little better than a nympho-maniac. She had an imbecile son. Tiberius was a man naturally heartless, cruel and licentious. In his later years he seems to have lost all moral sense, and illustrated the most shameless sensuality and cruelty. Caligula, reputed great-grandson of Augustus, was epileptic as a boy, badly formed and weak-minded as a man. He stuttered, was insomnic, and apparently had hallucinations. Claudius was also weak-minded, timid and credulous, with unsteady gait, weak knees, shaking head and dribbling lips.

"In Russia, the present house of Romanoff has shown plain evidence of the development of mental weakness and defects. The sister of Peter the Great was a brilliant woman, but his two brothers were weak-minded and had physical defects. Peter himself, though a man of genius, bore traces of the family neuroses. He had, at times, convulsions, and was, when young, the victim of a morbid antipathy to the water. Peter's daughter, Elizabeth, was a dissolute and hard-drinking woman. His grandson was weak-minded,

coarse and extremely licentious. The Emperor Paul, who succeeded Catherine II., was, according to Dr. Ireland, unquestionably deranged. His whims and fits of unreason were much more coarse and brutal in their tendency than those of King Louis, but they suggest the same malady implanted on a man of less refined nature and duller sensibilities. Paul was treated finally in much the same way as King Louis, only, as the former refused to abdicate, he was summarily strangled. The house of Romanoff has improved in the last three generations, as the result, doubtless, of the constant infusion of Teutonic blood.

"A study of the royal families of France and of England, would bring to light some interesting neuroses, but we have said enough to illustrate our subject."

---

MONUMENT TO DR. BENJAMIN RUSH.—The Committee having in charge the arrangements for erecting a monument to the distinguished American physician, Dr. Rush, state that the purpose to do so has met with the most cordial approbation of the profession throughout the whole country. Congress is placing in the Memorial Hall of the Capitol the statues of the founders and men of mark in the Republic, each State contributing those of two of its most eminent citizens, and the collection already includes the Winthrops, Samuel Adams, Hamilton, Livingston, Clinton, Roger Williams, Nathaniel Greene, Collamer, Fulton, Roger Sherman, Trumbull, Baker, Wm. King, Muhlenberg and Ethan Allen.

Of the *Presidents*, Washington, Jefferson, Lincoln, Garfield and others, have their effigies in stone or bronze. The *Military* and *Naval* heroes of the country have been honored in the persons of Scott, Thomas, Farragut, McClellan, etc. The *Law* has its representative in Chief-Justice Marshall, and *Science* is recognized in Prof. Henry. The *Church* is to have its statue to Wesley; and *Philanthropy* is to have a monument to Peabody.

Painters and sculptors, presidents and lawmakers, generals and admirals, the scientist and the discoverer, the philanthropist and the teacher, the jurist and the divine, thus all appropriately commemorated, the profession of *Medicine* ought not to delay longer in erecting its enduring testimonial of DR. BENJAMIN RUSH, who was not only a great physician, teacher and investigator in medicine, a philosopher, philanthropist, eloquent lecturer and accomplished writer, but also

a fearless patriot and founder of the Republic, a member of the Continental Congress and signer of the Declaration of Independence, the first Surgeon-General of the Army of the Revolution for the Middle Department and Physician-General of Military Hospitals, and a member of the Convention for the adoption of that Federal Constitution under which we now happily live.

Seventy years ago it was written of him—"Considered in relation to the entire composition of his character—as a practitioner, a teacher and a writer—Dr. Rush must be acknowledged to have been the most distinguished physician that America has produced;" and a later author has said, "The loss of no individual of this country, excepting Washington and Franklin, has been lamented with more universal and pathetic demonstrations of sorrow. As a physician, he has left upon the age in which he lived the impress of his character and genius; in the minds of his countrymen he holds an undisputed preëminence; and among his foreign nations it is acknowledged that the fame of Sydenham has been rivaled by that of Rush."

The existing statues in Washington have ranged in price from \$15,000 to \$50,000, that of Prof. Henry having cost \$15,000, and that of Chief-Justice Marshall \$40,000, both civic statues by Story. It may be approximately estimated that \$40,000 will be sufficient to erect a monument that will be fitting and unexceptionable as a work of art, and it does not admit of question that this sum can be speedily raised among the many thousands of physicians and students of medicine in the United States. That no one may be debarred the privilege of contributing, a subscription rate of one dollar from each individual has been determined, and accordingly each physician, in each State throughout the United States, is solicited to remit that amount to the member of the Committee representing the State, Territory, or National Service to which he belongs, who will also receive voluntary donations of such other sums as may be tendered by persons interested in the national undertaking.

The member of the Committee representing the State of Ohio is Dr. G. A. Collamore, of Toledo, O. Contributions, therefore, of physicians residing in Ohio, should be sent to him. The member of the Committee for Indiana is Dr. J. H. Davisson, of Warsaw; for Illinois, Dr. S. J. Jones, of Chicago; for Kentucky, Dr. Steele Bailey, of Stanford; for Missouri, Dr. Geo. Homan, of St. Louis; for



Kansas, Dr. F. D. Morse, of Lawrence; for Iowa, Dr. J. F. Kennedy, of Des Moines; for Minnesota, Dr. J. H. Murphy, of St. Paul; for Michigan, Dr. G. E. Ranney, of Lansing; for West Virginia, Dr. S. L. Jepson, of Wheeling; for Tennessee, Dr. C. C. Fife, of Knoxville, etc.

---

THE ASSOCIATION OF AMERICAN PHYSICIANS.—This is the name assumed by an organization (limited) made up of a number of physicians who met in the Army Medical Museum at Washington, June 17th, 18th. Dr. Francis Delafield was chosen President. A number of papers were read by members of the organization. The title of one of the papers was "Tendon-Jerk and Muscle-Jerk in Disease, Especially with Reference to Posterior Spinal Sclerosis."

The Constitution of this organization (limited) provides that an annual session shall be held in the month of June, in the City of Washington. It provides, also, that the proceedings shall consist principally of debates carried on by a certain number of the members, while the others shall attentively listen and digest the learning proceeding from the debaters. The debaters are to be selected at a previous meeting, two on a side, to be called Referee and Co-Referee. The active membership is to be limited to one hundred—for the reason that it is presumed that out of the 80,000 physicians of the United States, and the several thousands in Canada, there are only that number who possess sufficient qualifications for membership. "Physicians of sufficient eminence to merit the distinction, may to a number not exceeding twenty-five, be elected honorary members." But is scarcely probable that more than two or three, if even that many, being too ancient to be active members, will be found possessing the transcendent eminence to entitle them to become honorary members.

---

CINCINNATI INDUSTRIAL EXPOSITION.—It affords us great pleasure to inform our friends that there will be held this fall, in Cincinnati, another EXPOSITION—the Thirteenth—beginning September 1st, and continuing until October 9th. The Twelfth Exposition had exhibitors from twenty-nine States and four Territories, and numerous foreign countries, and was attended by 327,000 visitors.

Although the exhibitions at previous Expositions have been very great, yet those at the coming one will surpass



any of those of the past. We understand that already so much space has been engaged as will make it necessary to provide extra rooms.

The exhibition of machinery in operation, and the display of manufactures and works of art and utility, are features of great novelty and beauty. The floral displays are attractions unrivaled—they must be witnessed to be appreciated. The costly collection of paintings, statuary and art reproductions is of high merit, and will be of particular interest to the visitor. The exhibition in the scientific and educational department (F) will consist of chemicals, drugs, pharmaceutical preparations, oils, paints, etc. Chemical, philosophical, astronomical, surgical and dental apparatus. Industrial application of electricity, telegraphic and telephonic apparatus, electric motors, electric lighting and signaling apparatus, dynamo-electric machines, electro-plating machines, medical galvanic batteries, etc. Gas-making apparatus, distilling apparatus. Educational appliances, school-room apparatus. Natural history, archæology.

There will be a display of geological specimens that can not be surpassed.

The Society for Prevention of Cruelty to Children and Animals will make a display of instruments of cruelty that have been collected, that will be wonderful indeed.

The coming Exposition, we will assure our friends, will well repay the travel of many miles to visit.

---

DR. OLIVER WENDELL HOLMES.—This gentleman is now in Europe. We learn from the *Philadelphia Medical Times*, its London correspondent writing, that he is being feted by the London literary societies. His portrait appears in the illustrated papers, and everybody seeks to do him honor. Unfortunately, the correspondent says, he does not appear disposed to give his professional brethren any taste of his after-dinner quality, and declined an entertainment arranged in his honor by the medical profession in Liverpool.

---

ALETIS CORDIAL.—Dr. J. Stephenson, of Maine, writes: "Aletris Cordial is a most valuable remedy. I have, at present, a patient who miscarried at about six months in two successive pregnancies. She has now been taking Aletris Cordial three months, and has advanced to the seventh month with no indication of miscarriage."

# THE CINCINNATI MEDICAL NEWS.

VOL. XIX. No. 24. }  
Old Series.

AUGUST, 1886.

} VOL. XV. No. 8.  
New Series.

## Original Contributions.

### Translations from Our Foreign Exchanges.

Translated for MEDICAL NEWS, from the French, by Dr. Illoy,  
Cincinnati, Ohio.

#### HYPNOTISM FROM A THERAPEUTIC STANDPOINT — BY DR. FOURNIER.

Under the above caption Dr. Fournier, ancien interne des hopitaux and physician to the Hospital Angouleme, publishes in the *Gazette des Hopitaux*, two observations preceded and accompanied by remarks which deserve the special attention of our confreres, especially so since the practice of hypnotism tends to become more and more general without sufficient regard to the inconveniences it may cause and the danger with which it may be accompanied.

Since a number of years the attention of practitioners has again been drawn to the curious phenomena of hypnotism. Messrs. Charcot, Bernheim, Ricket, Dumontpallier, Battey, etc., have occupied themselves with this hypnotic state, of which I. Braid had long ago made a complete study.

The very strange and interesting phenomena of *suggestion*, have given rise to the idea of treating certain neuropathic conditions, *e. g.*, hysterical paralysis, with a *suggestive therapeutic*, and I must say that some very curious observations of cure have been published. But outside of the influence of suggestion, what may we expect in medicine of hypnotism itself—that is to say, of the nervous sleep on the patients affected with neuroses?

We find in the very excellent book of Dr. Battey on hyp-

notism, the following passages, which treat of the question here raised :

“ It is especially in medicine that hypnotism, employed methodically, is destined to render great service.

I. Braid, the founder of hypnotism, wanted to make this state a panacea for all the evils of the nervous system. Recognizing the great exaggeration, it can nevertheless not be contradicted that there exist a certain number of cases the cure of which is positively verified ; above all, in fact, in cases of morbid trouble produced, not by an organic lesion, but by a disturbance purely dynamic, there is nothing astonishing in admitting that in these cases hypnotism can bring about a special modification of the nervous centres, whence an amelioration or cure may result” (Battey’s Treatise on Hypnotism, p. 159).

Further on the author adds : “ We have arrived at the conviction, after numerous personal observations, that in hysteria, perhaps equally so in epilepsy, the attacks are markedly diminished in frequency as well as in intensity, as if the hypnotic state served as an outlet—as a safety valve, as it were, to the nervous force.”

On the faith and affirmation of this author, we resorted to hypnotism in the two cases of which we give below the histories and records.

Case 1.—*Attacks of Epilepsy—Treatment with Hypnotism.* M. (Jean), thirty-six years of age. Subject since his seventh year to pains in the head and absence of mind, which affect him from time to time.

His masters, for he is a servant in Angoulême, report that one day, whilst serving at the table at a great dinner, he suddenly let fall a plate which he carried, and, all surprised, declared that he did not know what happened. Since a year these seizures of absent-mindedness, these pains in the head, the phenomena of epileptic vertigo, which constitute the *petitmal*, gave way to well-marked attacks of frank epilepsy ; they recur every twenty days, sometimes every twenty-seven days, so that during the year he has had fourteen well-marked seizures. Treatment with bromide of potassa in large doses, then with belladonna after the manner of Trouseau, having given no result, I decided to try hypnotism, an attack most intense having come on him suddenly on May 7th, on the Place de l’Hommeau. The first seance of hypnotism was held on the 11th. By means of a highly polished nail fixed in a cork, I obtained at the end of barely

half an hour closure of the eyelids, which came on after a few moments of staring, and a complete sleep.

Putting into action the neuro-muscular excitability, so well described by Charcot, I raised his arms in the air and they retained that position. I also suddenly flexed the legs upon the thighs and raised the lower limbs, which also retained their position, so that the subject sitting in the chair remained for almost ten minutes in this bizarre position, the arms and legs in the air. He awoke about this time, complaining of some heaviness of the head, which, however, very rapidly dissipated.

When awakened, he told us that he had heard perfectly well the words we had addressed to him, but that it had been impossible for him to reply. He said he had been nailed, as it were, to the place, not being able either to answer or move. He affirmed that he had a very painful moment preceding the sleep—a moment when he felt himself somewhat awake, but could not unhook his arms (this was his expression).

However, the symptoms all rapidly disappeared, and he left my office after a little while not feeling anything.

May 12th. The patient had this morning a seizure of absent-mindedness, for after the grand attack he always has these for eight or ten days. Another seance of hypnotism; nothing to note.

May 13th. This morning no absent-mindedness, but he experienced another grand epileptic attack, analogous to that which occurred on the 7th. Another seance of hypnotism; nothing to note.

May 14th. This morning neither absent-mindedness nor epileptic attack, nevertheless, the hypnotic sleep is obtained in about ten minutes, and he awakes spontaneously after the lapse of about the same period of time.

May 15th. Another seance. No absent-mindedness to-day or yesterday.

May 17th. Seance. Sleep obtained in a very few minutes; nothing particular to note; day before yesterday and yesterday in the afternoon he had a period of absent-mindedness.

May 18th. Seance; nothing to note.

May 20th. Yesterday evening about four o'clock he had an epileptic seizure, more violent than that of the 7th. The wife of the patient attempted to hypnotise him and had fully succeeded.



May 22d and 24th. Seances ; nothing new ; but the 25th, at half-past eight in the evening, he was seized in one of the parks of the city with a most violent epileptic attack.

In the face of these results we renounced the treatment by hypnotism ; our patient, in fact, whose attacks previously had come only every twenty or twenty-seven days, had now three in the space of fourteen days.

Case 2.—Madame C., thirty-four years of age ; since two years she is subject to hysterical attacks which come on at the menstrual epochs. From the month of October, 1885, to the month of May, 1886, they remained in abeyance, but April 25th they came on again with increased intensity.

May 28th. From four to eleven o'clock in the evening she had a hysterical crisis, marked by palpitations, convulsive movements and extreme oppression.

Having at different times employed diverse remedies, bromide of potass., valerian, opium, hydrotherapy, and having even cauterized and cured in this patient an ulceration of the cervix, and seeing the hysteria reproduced despite all these remedies, I determined to have recourse to hypnotism.

May 30th. At two o'clock the first sitting was had ; the patient was put rapidly to sleep, barely a few minutes sufficing for this. I put in motion, as in my first patient, the neuro-muscular contractility, but as in him I could not bring about the phenomena of suggestion ; she awoke spontaneously after a few minutes.

The same night of the 30th to the 31st of May, I was called to the lady, who was a prey to the most intense attack of hysteria. This crisis did not present the characteristics of former ones ; it began with the most frightful hallucinations ; the patient saw robbers invade her chamber, massacre her children before her eyes, seize her and drag her by the hair. These phenomena were followed by a most intense oppression and palpitations of the heart, causing great anxiety. She had no convulsions as in former attacks. One would say that the practice of hypnotism, acting on the brain alone, had called forth the cerebral manifestations of hysteria.

In the face of this result, so direct, so immediate, I likewise renounced in this second case any further trial of hypnotism.

These two observations should, it seems to me, impose on physicians a great reserve in the employment of hypnotism in the cases of neuroses. Far from serving as an outlet,

as a safety valve to the nervous force, as Battey claims, the hypnotic state has in the two cases we have just described, increased the irritability of the nervous centers and called forth fresh attacks.

The facts tend also to prove that a great reserve should be had in the use of hypnotism in healthy persons.

Is such a dynamic excitation without any inconveniences, may it not at times provoke, in persons disposed to nervousness, the manifestations of this nervous condition? From the two cases related, we can readily presume the possibility of such an occurrence.

On the whole we believe that physicians would act prudently in not vulgarizing the practice of hypnotism in the world. There are enough hysterical persons, enough hypochondriacs, enough neurotics of every class, without our seeking to increase their number.—(*Tribune Medicale.*)

PURGATIVE FOR CHILDREN.—HUCHARD.

R. Castor oil.

Malaga wine, . . . āā ʒ ss.

Shake before administering.

NERVOUS COUGH.—GRAEFFER.

R. Muriate of cocaine, I 1-5 grains.

Aq. destill, . . . ʒ jss.

Bitter almond water, Mx.

Potass. chlorat., . . grs. x.

M. Use with atomizer.—(*Union Med. du Canada.*)

## Light and the Common Sources of Danger to Human Vision.

Read before the Sanitary Convention held at Lansing, Mich.

BY LEARTUS CONNOR, A. M., M. D., OF DETROIT.

*Whence* came light? The oldest of books answers this query thus: "And God said, Let there be light; and there was light." Whatever may be said of this answer, all others are pure hypotheses, valuable only as means of retaining what facts we possess while we seek new ones.

*What* is light? For ages this query has puzzled the minds of scientists and philosophers, and still they are undecided. Fifty years ago light was regarded as consisting of solid

particles of matter which originated in a luminous body and radiated thence in every direction. Various difficulties finally arose in the endeavor to explain by this theory the recognized facts pertaining to light. These became so numerous that a new theory was started, viz.: that an unknown and an unrecognizable ether pervaded all space and all objects, and that light consisted in certain movements of this ether. The luminous body started these movements, which follow well-known laws. For a long time this theory has held sway as the most useful to students and practical workers.

*Physiologically* light is that agent by which the retina is so excited as to send along the optic nerve fibres to the brain, a force which shall bring into activity the brain cells which by their action make us cognizant of light. Beyond any doubt, from the first of this complicated process to the last, motion of some kind is the essential agent.

Bearing this in mind, it will be seen that seeing, *physiologically considered*, is only another form of touching. Just as touch, within certain limits, is conducive to the health of the organs of touch, the nerves that convey the impression to the brain, the brain cells themselves, and indeed the entire organism, so sight within certain variable limits is absolutely essential to the health of the organ of vision, of the optic nerves, and of the brain cells in which the nerve fibres of the eye terminate. But equally true is it that the touching red hot iron by the fingers will destroy the tissues actually reached by the intense heat, so will overintense light destroy the organ of sight. The illustrations of this fact are numerous; we give but one: In 1829, L. Plateau, Professor of Physics in the University of Ghent, desired to observe the effect of irritation of the retina. For this purpose he looked steadily at the full blaze of the sun for twenty seconds. Chronic iridochoroiditis followed, ending finally in total blindness. Yet in spite of this calamity he continued his physiological researches until his death, Sept., 1884.

As analyzed by the spectroscope, light is a complex affair. Not only does it contain luminous rays, divisible into rainbow colors, but also heat rays and chemical rays. Hence the rays of the sun possess both chemical and heating power in addition to light. The relative influence of these separate agents in producing the sensation of sight no one can at present definitely tell us. It may be that still

other forces exist in the solar light of which our present methods of analysis give us no hint.

Colors and color blindness are subjects sufficient to occupy us for days instead of a few moments, but time forbids that we should dwell upon them now.

Beyond a question the best eyes are those which are most constantly bathed in the sunlight in the outdoor air. Deformities and diseases begin with the eyes in about the same proportion as men confine themselves and their children to the house, produced by civilization.

Time admits the mention of but few of the common sources of danger to human eyes. We begin with one which is the cause of more actual blindness than any other, viz.: the inflammation of the eyes of the new-born child. This period of human existence is fraught with so many dangers that a large proportion of the human race never pass beyond five years. A like fatality attends the life of the eye. Either by its passage into the world, or immediately on its entrance into it, some irritant in the shape of a poison, chemical or vital, so disturbs the integrity of the delicate covering of the eyeball and lining of the eyelids that a severe inflammation follows. Owing to carelessness, or ignorance, or stupidity, or cursedness, these eyes are very often neglected until they are actually destroyed by the corroding action of the diseased processes. The worst examples of this disease are to be found in institutions containing large numbers of young children. The disease is also prevalent among the shiftless, ignorant and vicious, especially when aggregated in considerable numbers. Occasional cases are found in every grade of society. In every place there still remains great ignorance as to the nature and dangers of ophthalmia of the new-born child. Hence cases occur in every community in which eyes are crippled or entirely destroyed from this cause alone. What can be done to prevent this ever-recurring loss of human eyes? The only remedy available, or of any practical importance, is such education of the people, the midwives and the doctors, that they shall regard every child's eyes as worthy of attention, even if it is a baby. They may at least be taught the axiom that dirt in a baby's eyes is the red flag of danger, and calls for water quite as much as a fire raging in a town. It calls for such frequent use of hot water as will suffice to keep the eyes clean of all discharges. It calls for the avoidance of all applications to the baby's eyes of poultices, of Thompson's eye water, and



all other remedies not ordered by an educated physician. By this simple rule of cleanliness with pure hot water most eyes could be saved. But another cause of inflammation in the eyes of the new-born babe is the injudicious exposure of the eyes to a strong light. Without a thought of the consequences, these delicate eyes are not infrequently exposed to the glare of the rays direct from the sun, or from a strong lamp or gas-jet. I have often known most disastrous consequences to follow from this cause. Again, it not infrequently happens that the attendant and nurse, in their desire to cleanse the babe, let some soap get into the eyes. Sometimes this is without serious results, but it often happens that it produces a severe attack of purulent ophthalmia. It would seem as if the mere mention of these causes of eye diseases would so commend themselves to every person as to be fixed permanently in their memories and practice. But as a fact, few remember these things. Further, there is a tradition widely prevalent that the discharging of matter from a babe's eyes is a healthy sign, as thus other more serious disease is averted from the child.

But other persons than new-born babes suffer from purulent inflammations of the eyes. Indeed, no age, no race, no sex, no condition, escapes this disease. It occurs with all degrees of severity, and with all varieties of results. Some countries, as Egypt, are greatly afflicted with it. Here the storms of fine sand and the filth of the people have much to do with its wide prevalence and horrible results. For convenience with reference to its causes I now speak of many forms of inflammation of the eyelids as one. These are recognized by the non-professional person as red eyes, swollen eyes, ever discharging more or less matter. As in Egypt so in Michigan, these eyes may result from some external irritant, as fine dust, prolonged exposure to strong light or heat, or they may be due to some poison taken from some other sore eye or other septic-producing sore. It should be remembered by every person that the secretions from a running eye are always dangerous and should never be brought into contact with a sound eye. Hence it is that persons traveling should never use any napkin or towel that has been used by an unknown person. It is a wise rule never to touch one's eyes with his own fingers except directly after washing them. Usually no harm might result from following the practice of many in constantly rubbing the eyes with the fingers on the slightest irritation of the same, but in the

exceptional case a severe inflammation results. I have personal knowledge of several eyes lost by professional men because they forgot this truth and transferred poisonous material by means of their fingers to their eyes. The practice is a dirty one and should be abolished. I heartily sympathize with that lady who dismissed a celebrated specialist because his finger-nails were unclean. In the light of recent researches of microscopists she was entirely justified. Very careful scientific men tell us that the finger-nails often contain under their free edges vast numbers of animal and vegetable germs, the sources of numerous diseases. Beyond a doubt, a dirty doctor is an unsafe man. But all dirty fingers are enemies to the eyes with which they may come into contact.

But the same sort of sore eyes may be induced by facing the strong light of the sun, or lamp, or gas, while engaged in intense work. All will remember cases induced by the strong reflection of the sun from the water during a trip of a day or so. The causes of these diseases thus far alluded to are avoidable, but occasionally there is an epidemic that, like the winds of the heavens, none can tell whence it cometh or whither it goeth. These epidemics are relatively rare, and the belief generally is that they have some relation to bad hygienic states and as these are gradually removed they will cease to reappear.

Another common form of eye disease, occurring most frequently in children, appears as a series of little ulcers upon the front portion of the eyeball. They are usually excessively painful, as the terminal filaments of the nerves are exposed to the air and secretions of the eye coverings. The subjects are usually children from four years old to puberty. These cases can generally be recognized by the posture of the sufferer. The eyes are always closed as much as is possible and still see to get about at all. The head is bent forward upon the body, and the body forward as far as gravity will admit and permit the person to retain an erect posture. This disease often seriously cripples the eye by leaving a scar directly in front of the centre of vision. When once this scar is formed no agent can remove it more than a scar elsewhere on the surface of the body. The cause of this trouble lies partially in the constitution of the patient. It is allied to the so-called scrofulous constitution and includes the habit that tends to consumption. In persons having this constitution slight errors of diet or unfavorable sur-

roundings may be followed by the eye disease alluded to. The removal of either element in its causation would be followed by the prevention of this disease. When consumptives and scrofulous persons gain sufficient self-control to endure celibacy rather than marry and propagate their vices of constitution, then we shall hope that these diseases will mainly disappear from society.

A common cause of many eye affections is the group of children's diseases, as scarlet fever, measles, diphtheria, etc. The disorders thus originating may affect any tissue of the eye, and may be trifling or severe in their course, and harmless or fatal to the eyesight in their ending. Those caring for children sick of these disorders can not watch and guard too assiduously against the development of these eye troubles, or nurse them too attentively when they have been developed.

Of the injuries to the eyes from large pieces of solid matter thrown into them with more or less violence, we have no time to speak. It would seem a self-evident proposition that those whose occupation exposes them constantly to such accidents would strive to protect themselves by the wearing of plain glasses before their eyes. But singularly enough, they can rarely be persuaded to take this trouble. In this respect they resemble the English coal miners and Sir Humphrey Davy's safety lamp. These had rather run the risk of explosion in the mines from the ignition of the inflammable gases than be bothered with the little lamps. This is simply a sample of the obstacles that beset the efforts of the worker in the fields of preventive medicine. The people can be shown what is for their good, but they can not always be made to accept it.

We have called attention very briefly to some of the causes of eye diseases which originate outside of the eye itself, now we shall note a few of the causes of disease starting from the eye itself.

First, we note the overuse of the eye while in its formative state. This occurs in connection with the book education of young children. No horseman will put his six months' old colt to training for the race, or cause him to be harnessed to the plow or loaded wagon. Yet parents are found in every school district in the United States who do not hesitate to send children four, five, six and seven years old to school. School boards and teachers exist everywhere who do not hesitate to compel these children, whose eyes

are still very imperfectly developed, to sit at one desk from four to eight hours a day, with only two or three brief intervals, looking at a book fixed at a definite distance from the eye. We hesitate nothing in saying that no one of the members of these school boards or no one of these teachers could sit in so constrained a position for so long a time continuously, without great bodily and eye weariness, especially if they are compelled to pay as close attention to the book as are the little babies found in all of our public schools. Children's eyes are being constantly ruined in large numbers by abuse of their eyes, as every oculist of large experience has daily evidence of the saddest nature. What person is there so dead to humanity as not to mourn over little children whose eyes have been ruined before they have reached the age of six years, by the exactions of a school life utterly incompatible with the normal growth and repair of their eyes.

Secondly, we note the diseases induced by overwork of a *badly formed eye*. As to their shape, eyes are not infrequently made imperfect. The principal defects are near-sighted, far-sighted and irregular-sighted. In the near-sighted eye, the anterior-posterior diameter is too long, so that without great muscular effort vision is imperfect. In the far-sighted eye, the anterior-posterior diameter is too short, so that great muscular effort is required to see. In the irregular-sighted eye the shape of the eyeball is flattened from side to side, so that of many lines crossing each other at a common centre, some will be clear and others indistinct. Now, all of these defects call for a far greater amount of muscular effort to the eye than is required in a normal eye. Hence the person having either of these defective eyes, who attempts to do as much work as his fellow-student who has perfectly formed eyes, will find himself in a similar position as regards fatigue as the one-legged man who attempts to keep pace with the two-legged one during a long and difficult journey on foot. The overuse of these deformed eyes is a prolific source of many eye diseases. In some cases the eye itself undergoes such changes as destroy the sight in part or whole. In others we find serious brain disorders, headaches, insane delusions, hysterical fits, epileptic fits. In others there is simply a perpetual weariness on prolonged use of the eyes. Most of these defects are curable by well-known scientific appliances. The number of cases of eye diseases due to these defectively formed eyes



is very great, and apparently with the increasing tasks placed upon the eyes by successive generations, is rapidly increasing. How shall this be prevented? This is a query difficult to answer in any practical manner. Certain it is that if any improvement occurs other than by the killing of the defective, it must be from prohibiting the abuse of the eye during the early years of childhood. A long step would be taken in this direction were a law passed prohibiting the admission of any child into any public school until it had passed eight years of age. A farther aid would be a gradation of the number of hours spent in school, so that, beginning with two hours a day, there should be a gradual increase in the number of hours, term by term, or year by year, until finally a full school day was required. The same principle is involved in placing a boy at a trade requiring the greatest strain upon the eyes constantly, while his eyes are defective in their formation. It is the lot of those having many eye cases to meet with the deplorable results of such unwise action.

A prolific cause of eye disease is the continual use of the eyes in a bad light. The query now arises, what is a bad light? It may perhaps be difficult to answer this question so as to meet all possible circumstances; but we may at least answer it so as to meet most circumstances:

(1.) A light is bad which will not enable a person with healthy eyes to read the finest print easily at a distance of twelve inches. How many seats in our public or private schools, how many offices, in which clerks and book-keepers are compelled to look at fine print and finer figures for ten or twelve hours a day, how many homes in which the family living rooms will admit of such reading? In so far as our knowledge extends, these school-rooms, these business offices and these homes are greatly in the minority.

(2.) A light may be sufficient in amount, and yet, from the fact that it strikes the eye from a wrong direction, be emphatically a bad light. Thus if the light come from the front of the reader it contracts the pupil of the eye more than it should, and the light does not fall directly upon the printed page. Hence the letters are relatively indistinct, the full amount of light is shut off from the eye, and the retina is irritated by the rays falling directly upon it. If the light comes from the right of the reader, the movement of the right hand in turning of the pages casts alternate light and shadow upon the page, and so calls into frequent action the

iris and ciliary body, and so places the eye at a disadvantage. The same is true if the light be placed directly behind the person. But if it be placed a little behind, to the left, and a little above the eyes of the reader, it will fall at right angles upon the page and be reflected directly to the eye; nothing will interfere with its constant intensity, and so the eyes will be placed at the greatest advantage for the use of what seeing power they possess.

(3.) A light is bad which flickers, is now bright and now dark. The reason for this is that the whole functional activity of the eye is ever on the ebb and flow, and so mainly wasted instead of being used for the object of seeing. It is much like the farmer who spends his energies in moving from one field to another his implements for harvesting his crop, rather than keeping them at work in one field till that is harvested and then moving them to another.

(4.) A light is bad when it lacks greatly in intensity, as at twilight in the morning and the evening. Numerous eyes are injured by being used at fine work or reading at these times.

(5.) All colored lights are bad for purposes of reading or study. Many of the colors are directly irritating to the retina. All of them are at best but partial light.

A very common source of eye diseases is the practice of reading while riding upon the cars. In fact some of the most intractable cases of eye disease that have ever come to my notice had their origin in this habit. The fact that so large a proportion of our population spend much of their time in traveling on either the steam or horse cars, makes the habit one of importance. How is it that this habit produces eye disease? Perhaps this could be best appreciated if each person would take up a paper, and while reading move it back and forth from right to left, just as it would be removed from side to side while reading on the cars. It will soon appear that the strongest eye will soon tire. It does so because the muscles of the eye are compelled to be constantly on the greatest tension and execute the most rapid movements in order to enable the eye to form a distinct image. To all intents the results are identical with reading in a flickering light, or one of varying degrees of brightness. The nerves controlling these muscular movements soon tire, and then speedily become exhausted.

Bad air is a not uncommon cause of eye disease. Bad air in churches, bad air in saloons, bad air at home, bad air

in a store, bad air in the nursery, bad air in the school, bad air in almost every building in which human beings congregate. The degree of badness varies, but after all the efforts of the missionaries of the gospel of sanitation, the fact still remains that about the only place that an approach to good air can be had is in the house which has mother earth for its floor, the blue sky for its roof, and the horizon for its sides. So true is this that a cure of some eye troubles is impossible without turning the patient out of doors to live all the time which the circumstances will admit. How does bad air induce eye disease? (1.) Bad air lacks the oxygen necessary for the proper health of the membranes covering the eyeball, hence this membrane is starved. All starved tissues, as starved persons, take on diseases more readily than well-fed ones. (2.) Bad air of inhabited rooms contains the effete products thrown off from the lining membranes of the nose, throat, lungs and skin. The rebreathing of air is exactly the same in principle as eating and drinking the discharges from the bowels and bladder. In either case the products of waste tissue changes are thrown off from the body. In the case of the skin and lungs, the discharge is relatively minute, and imperceptible to the sense of touch and sight; but while small in amount, the discharge is constant, never ending during any moment of life. I have often wished that the real amount of these discharges during twenty-four hours could be collected and presented in a tangible form to the average person. Chemists and microscopists have collected it and measured it, so that it has been demonstrated to exist as really as the other excretions from the body. Well, this mass of rotten material, accumulating in a close room, finally begins to irritate the covering of the eyeball. It may be weeks or months before the air in any given room will induce this result, but sooner or later all feel more or less of this. From irritation it is but a step to inflammation, especially in a tissue deprived of its proper amount of oxygen and good blood, and proper nerve supply. From this point onward the issue of any given case will vary according as the warnings are heeded. If the individual causes his rooms to be perfectly ventilated, and keeps much in the open air, a return to health of the eye may be confidently expected. But if the handwriting upon the wall is not understood, or if understood not heeded, then some more serious turn in the eye disease is likely to occur, involving a more or less permanent impair-

ment of the functions of sight. I am specially earnest in the presentation of this cause of eye disease, because I am convinced that neither the profession nor the laity sufficiently comprehend it in its most important bearings. Sanitarians insist upon good air for the influence it has upon the health of the lungs and the body in general, but my point, while accepting all the emphasis they place upon it, insists that we should seek for it in order to avoid one of the important causes of eye disease. In what I have said in this place I have made no mention of the other impurities found in the air as causes of eye diseases, aside from those thrown off from the human body during the exercise of its normal functions of breathing through the skin and lungs. The case is made by far stronger when it is remembered that such bad air contains particles of dust derived from the worn surfaces of the articles of furniture in the room, products of decomposition of organic matters in and about the room, the products of combustion in stoves, in lamps, or from gas. It will be strange to find a room in which all air from imperfect sewerage of all sorts is absent. Currents of air also circulate through the strongest and thickest walls of the rooms, bringing and leaving what they can carry of poisonous gases in the bodies through which they have passed. Of tobacco smoke, this is an ingredient of the air of a large proportion of public rooms. The selfishness of the tobacco smoker is unparalleled by the selfishness of any other habit. He would not do half so harmful a thing if he expectorated into the face of each person with whom he came in contact, as he does by his puffing out his smoke to defile the air of all who are compelled to stay or pass near him. Yet so perverted by custom have become the senses of the community, that it is a matter of no remark that the mass of men continually fill the air with smoke, irritating to the eye as well as the entire respiratory passages, and to the smoke add other elements of a positively poisonous nature. That the human eye can and does endure the amount of tobacco smoke with which so many are constantly bathed, is one of the instances of the long-suffering forbearance of human endurance.

But tobacco in some instances produces a direct injury upon the eyes of those who use it to large excess. It is impossible to say that the daily use of a small amount of tobacco definitely injures the eyes, but it is settled beyond



question that large amounts in some persons result disastrously.

That alcohol in any of its forms, taken in large quantities and for a considerable period, will produce various diseases of the eyes, is too well known to call for much discussion here and now. Generally the excesses of tobacco and alcohol go together, so that it is difficult to tell where the evil effect of the one ends and that of the other begins. Blindness, partial or absolute, from excess in the use of these drugs, is a well-recognized fact in the studies of the eye.

Another vice closely associated with the abuse of alcohol and tobacco is licentiousness. As a cause of eye disease this is a factor most potent and most common. If in no other way, here the ways of the "strange woman" take hold on blindness and perils to the eyesight. The classes of eye diseases induced by licentious habits are many and of the gravest nature. It is true that science has found ways to meet and guard against the natural endings of many of these diseases, but many fail to have sufficient wisdom to apply to the proper source for relief until the fatal mischief has been consummated. The prevention of this class of eye diseases calls for the abolition of licentiousness, and of its allies, alcohol and tobacco, as common and habitual articles of food and drink. I am not here to discuss this question other than from the standpoint of the ophthalmologist. From this standpoint the interests of human eyes call for the preaching and the practice which will compel all to avoid the ways of the licentious, the drunkard, and the tobacco *habitué*. Of all the cases of eye diseases, those originating from licentiousness are the saddest. The wise man of old said: "She hath cast down many wounded; yea, many strong men have been slain by her." Or again, "Remove thy way from her and come not nigh the door of her house, lest strangers be filled with thy wealth and thy labors be in the house of a stranger, and thou mourn at last when thy *flesh* and thy *body* are *consumed*." Eyes consumed by the diseases engendered by licentious practices, eyes wounded thereby, are constantly before those caring for eye diseases. How shall the tide of this vice be stayed? is a question that has ever perplexed the wisest and most humane of men. To-day we have learned to avert some of the evils attending it, in so far as the eyes are concerned, but it is not at all certain that the current of vice has been greatly diminished.

We have thus seen that among the common causes of eye diseases are (1) poisons introduced into the eye, as in most cases of the severe inflammations of the new-born child, as in the purulent inflammations of later years, and in many cases of granular lids.

(2.) Defective constitutions, as in the case of those suffering from scrofula, or consumption, or rheumatism, or syphilis, etc., the fevers of childhood and adult life. These constitutions may be inherited or acquired by modes of life suited to this purpose.

(3.) Overwork in an eye still developing ruins and cripples vast numbers of eyes. This takes place most actively in the school-room and at home, and generally the damage is at least begun under twelve years of age.

(4.) Overwork in a deformed eye is prolific of a long and serious train of diseases to the eye, and indeed to other portions of the body. Deformed eyes may be of three varieties—near-sighted, far-sighted, or irregular-sighted. Each of these produces its own diseases of the eye, in its peculiar way.

(5.) Overwork of the soundest eye will, if persisted in under unfavorable conditions, be followed with disastrous effects.

(6.) Bad light is a cause of eye diseases for which it would seem as if there could be no excuse. Yet as a potent factor in the causation of eye disorders, it needs the most careful attention.

(7.) Bad air and all its accessories is a never-ending source of diseased eyes to all who live in our so called advanced civilization.

(8.) The habit of reading upon the steam or horse cars is constantly disordering vision, and in such a manner as to render it exceedingly difficult to cure the disorders. The habit should be avoided by all who would preserve their vision in its most efficient state.

(9.) Mechanical injuries can only be avoided by special precautions on the part of those engaged in trades liable to such injuries upon the eyes of the workmen.

(10.) Tobacco, alcohol and licentiousness form a triumvirate of great power to produce eye diseases of all sorts and varying degrees of gravity.

---

PROF. BARTHOLOW advises the use of naphtholine, two or three grains, in pill form, for stomach fermentation.

## Proceedings of the Nashville Academy of Medicine and Surgery.

THURSDAY EVENING, June 10th, 1885.

Academy met at usual hour, President J. W. Maddin, Sr., in the Chair.

The subject for the evening discussion, dysentery, was opened by Dr. Thos. Menees. The doctor defined dysentery as a disease of the large intestines, of specific and non-specific origin, characterized by hyperæmia, infiltration and necrosis, distinguished by discharges of mucus, blood, pus, and tissue *debris*, and attended with tormina and tenesmus. It is one of the oldest diseases known. Herodotus informs us that it and the plague reduced the army of Xerxes on the desert plains of Thessaly.

Sydenham, the prince of English physicians, describes an epidemic of it in London in 1669-72, though the modern history of it may be said to originate with Sennertus in 1626. It comes on down through Zimmerman, Pringle, Morgagni, and a host of others, until it strikes the eighteenth century, during which we find many great minds throwing light on the subject. It contributes the bulk of the second volume of the Medical History of the late war and is a lasting monument to the memory of its author, J. J. Woodward, of the U. S. Army. This disease is omnipresent. Wherever man has made his habitation, there you find dysentery.

It is, however, most frequent in the tropics and warm temperate climates. At 40° latitude the line is said to be pretty sharply drawn. It is most prevalent in summer and autumn. Shakespeare says that griping of the guts is one of the rotten diseases of the South. It is generally found in low, marshy districts, but not always. In Peru it prevails at an elevation of 8,000 to 13,000 feet above the sea level. Marsh miasm, exposure to cold, unwholesome food and water, unsanitary conditions are productive of it. It is contagious if contagion be admitted; *contagium animatum* is implied, for no chemical poison has the power of propagation. Languis in 1659 declared that swarms of worms could be found in dysenteric stools. Nyander in 1760 called dysentery a scabies intestinorum internum. Woodward says the great bulk of normal feces is composed of bacteria, micrococci and torila; the first two are said by

some authors to be as numerous in normal as dysenteric discharges, but not so with the torila. Baly in 1849 proclaimed a vegetable fungus as the cause of dysentery. Dyer in 1870 believed it to be the mildew or sweat which forms in fruits. The Doctor asked if epidemic dysentery was not caused from a miasm, a malaria (in its wide, etymologic sense, bad air), which emanates from the soil, a low form of vegetable life. Though prevalent in warm climates and marshy districts, it is not identical with the cause of malarial fever, though they are often complicated. Yet we find dysentery where we don't find fever, as, for instance, Gibraltar, Malta and New Caledonia are almost exempt from malaria, but are often visited by epidemics of dysentery. The Doctor dwelt at some length on the symptoms, pathology, diagnosis, and different kinds and complications of dysentery, with their sequences. In the early treatment of simple dysentery he advocated rest, warm baths, gentle aperient salines, or such astringents as the practitioner may prefer, alternated with opiates, calomel, bismuth, and soda, and low diet of bland liquid character will often give prompt relief. If malarial complications, give quinine; and if so, then there must be some hepatic derangement; a mild aperient of calomel and bicarb soda will act well. Warm fomentations, turpentine stupes, etc., over the abdomen, will be of much service. In sthenic cases benefit may sometimes be derived from leeches over the colon or verge of the anus early in the disease. If these means fail, he spoke favorably of irrigating or flushing the bowels with large injections of three or four pints, if necessary, of water, which, if desired, may be medicated with nitrate of silver, alum, salicylic acid, or other agents.

He dwelt at some length on the use of ipecac, as made known by Piso in 1648, and revised by Docht in 1858, and spoke approvingly of the use of this agent in selected cases in doses of from fifteen to thirty grains at intervals of eight or twelve hours, preceded by mustard sinapism over the stomach and abdomen, and thirty drops of the deodorized tincture opii given thirty minutes in advance. If malarial complications are present, give large doses of quinine between doses of ipecac. Where there are scorbutic complications, give the ripe fruits of the season, lemon acid and such anti-scorbutics as may be available. In allusion to the *modus operandi* of ipecac in this disease, he said it is a non-spoliative anti-phlogistic, a certain cholagogue, a non-irrita-



ting purgative, powerful sudorific, and a harmless sedative to the heart and muscular fibers of intestines. In the treatment of chronic dysentery, he spoke of bismuth, soda, tannic acid, logwood, turpentine, etc., internally, and nitrate silver, and zinci sulph. by injections with proper dietetic and hygienic regulations; change of climate, sea voyage, etc., would sometimes be necessary to effect a cure, and every therapeutic means would often fail.

Dr. Thos. A. Atchison said dysentery is a tropical disease. Heat increases molecular death and activity of the stercoraceous glands, which are the eliminating organs of the sulphur compounds of waste tissue; especially is this the case where the diet has largely been of meat. The mucous membrane of the bowels becomes hyperæmic, resulting in inflammation and its sequelæ. He could not, he thought, see the specificity of the cause. Dysentery, he thought, was a misnomer. In regard to the ipecac treatment and why it had fallen into disuse was because of the fact that it had been used too indiscriminately, and asked, Are we not now in danger of doing the same thing? Its *modus operandi* in this disease had not been investigated; as an emetic it has. Emesis injected into the arm produces emesis; its great action is to depress the vomiting centers, but it must have some other action. What is it? It is an active irritant; applied to the surface, a pustulant. The large amount given in dysentery tends to shock the terminal ends of the vagus, and so inhibit absorption; it sweeps through the alimentary canal, acts by substitution, restores capacity for the elimination of fecal matter and, quieting peristaltic action, it brings about its happy effect. He affirmed ipecac will not cure all cases of dysentery. Frequently we are disappointed when we have every reason to expect good results. In extensive ulceration or perforation it can do no good; or again, the blood may be so profoundly devitalized by the disease as to render this remedy useless. Ipecac can not regenerate blood. In simple catarrhal dysentery, the speaker thought the salines best suited; no evil result could possibly come from their use, while we can not say this of ipecac, for its use is sometimes followed by the raw tongue and typhoid condition. By its use we have substituted an inflammation almost as bad as the original disease, all functions are in a state of *quasi paralysians*, and a long and tedious convalescence follows before your patient is again restored to health.

Dr. Thos. L. Maddin said he was interested in what had been said. The pathology and symptoms of the disease were clear. He would like to ask, however, why it is that we always have tenesmus in dysentery. There is hyperæmia of the bowels, and this through the excitor-motor arcs excites irregular contraction of the muscular coat of the bowels, of the same nature as the hour-glass contractions in parturition and irregular rhythm of the heart. Then the law which shapes the treatment of all inflammations is applicable here, and that is rest. Our first point in treatment is to allay the irritation. Here opium is our remedy; it controls the bowels, lessens peristaltic action, while ipecac does the work. Under its use the tenesmus stops, tormina stops. Now with the use of ipecac we substitute for the tormina a sympathetic pathological condition which is nausea. The speaker said he generally controlled the tenesmus with morphia and atropia. Ipecac has the power of controlling the bowels; under its use large amounts of mucus are thrown off, which lubricates the bowels and allays the hyperesthesia; it stops local determination and nature accomplishes the rest. The Doctor spoke of the different varieties of dysentery, the catarrhal, follicular and diphtheritic. In local treatment he was in the habit of injecting large quantities of hot water containing tinct. opii. and alum, which stops tenesmus by stimulating the bowels by distention. He then referred to the relation of hepatic abscess and dysentery; this complication is most frequently met with in equatorial countries and is produced by embolism. The breaking down of a large amount of tissue, *débris* entering the blood as septic matter, passing into the portal circulatum fibrin, coagulates around it, and passing on in the liver, finding lodgment in the intertubular cells, results in abscess. These abscesses may be single or multiple, they are without a pyogenic sac and burrowing are liable to coalesce. Ipecac should be administered in this disease, and if we have extensive ulceration followed by bismuth until we have black evacuations; in its action bismuth is a lubricant, a styptic, and a local astringent.

Dr. W. A. Atchison advocated the use of opium, saline cathartics and irrigation as the best means to be employed.

Dr. W. A. Cheatham favored the use of purgatives, and said he had derived more benefit from them in the treatment of this disease than from any agents.

Dr. N. D. Richardson said he had no satisfactory results

from the use of ipecac in the treatment of this disease, and believed purgation as the best treatment.

Dr. J. L. Watkins said dysentery was simply an inflammation of the mucous membrane of the colon; in some conditions small intestines were involved, but then this is not dysentery *per se*. Dysentery is a specific disease, dependent for its causation upon a specific germ. The sporadic form is simply a local inflammation of submucosa and muscular coats of the intestine; the glands becoming involved, assume a corrosive form of ulceration which eats through the coats of the blood-vessels of the parts, causing hemorrhage, which, in many cases, may prove fatal. The same etiological factors are productive of simple dysentery as are found in other inflammations.

The Doctor related the result of seven autopsies which he had held on subjects who had died of acute dysentery. He found the gall bladder in each case very much distended, containing a large quantity of bile which had undergone decomposition, but found no traces of the bile in the intestinal canal. He thought this condition suggestive of a therapeutic indication, and, as he thought, explained the action of ipecac. A free flow of the bile, he said, would exert a soothing influence on the inflamed mucous surface.

Dr. O. H. Menees said dysentery is both a specific and non-specific disease, confined to the lower bowel; in mild cases to only the rectum and sigmoid fluxure. The pathology only differs in degree in mild and acute cases. In extreme cases the membrane becomes red, inflamed or tinged with blood. The inflammation extending on to cæcum and solitary glands, we have the congested tumefied walls of the bowel increasing in thickness to, often, three times its natural thickness, except the muscular coat. To practitioners and pathologists the changes presented in the mucous and sub-mucous coats are most interesting. First, we have the infiltration; second, the solitary glands break down, resulting in ulceration. Peyer's glands and the submucosa break down in pus, and the mucous membrane becomes necrosed. He thought the condition of the gall bladder, referred to by Dr. Watkins, was simply a post-mortem, and not a pathological change. In regard to the action of ipecac, in this disease, he thought its therapeutic value lay in its relaxing effect, lessening peristaltic action, relieving spasmodic contraction, and hence by quiet and rest favoring recovery.

Dr. Thos. Menees said that the catarrhal and specific varieties are so distinct as that the pseudo-membrane occurs oftener in the latter. He took the position that, when the pseudo-membrane occurs in the specific variety, it is a mark of virulence, and not of specificity—it marks a point of gravity to which the disease may reach, and may be found also in the non-specific variety. What is the pseudo-membrane, and whence its origin? The progress of the inflammatory process causes more or less complete arrest of the circulation in the tissues involved, pus corpuscles migrate to form pus cells, and fibrin, or the elements which form it, produces a frosty or infiltrated condition of the entire mucosa, and this in turn leads to necrosis, by which you have the ulcer and sloughing, not only of the pseudo-membrane, but mucosa also. The inflammatory action, if continued, involves the muscular coat, next the serous tissue and perforation, followed by adhesions. The speaker said he thought he had been misunderstood in regard to the use of ipecac. He had said that ipecac was a non-spoliative, anti-phlogistic, a certain cholagogue, a non-irritating purgative, a powerful sudorific and a harmless sedative to the heart and muscular fiber of intestines. From its use we have all the benefit of bloodletting without blood, all the benefit of calomel without its irritating effects, all of tartar emetic without its uncertainty, all of opium without masking the disease. Thought Dr. A. assumed too much for the derivative action of ipecac.\* There is something in it as a cholagoguer, something in its relaxing effects, something in it as an anodyne, and something in its curative powers. The Doctor said he always used it in sporadic cases, and, if no complications are present, it will effect a cure. Why will it not cure every case? It is because of complications which may be hepatic, renal or malarial. He did not claim it as a specific in all cases, but urged it was the best agent, and from its use we have more universal cures. The speaker cited Muerhead in support of his argument. In 436 cases reported by this gentleman, only six deaths occurred in 21 consecutive months. In ten years it has reduced the mortality from this disease in the British army from 11 to 5 per cent.

The Doctor spoke of the value of salines and opium in simple dysentery, bismuth and soda in ulcerative, and urged irrigation as a therapeutic agent of great value.



Dr. W. G. Ewing read an interesting paper upon "Pelvic Inflammations," which was discussed by the Society.

Dr. Douglas said he agreed with Dr. Ewing that there was no clinical difference between pelvic cellulitis and peritonitis. Dr. Ewing says cellulitis may occur after parturition independently of any uterine or Fallopian trouble, holding that "inflammation of the mucous membrane is secondary to some previous lesion in cellular tissue." Upon this point Wylie says four out of five cases of pelvic abscess have their origin in diseased tubes and ovaries, and that these organs are always the foci of inflammation. Duncan asserts that pelvic inflammations are all secondary to diseased tubes and ovaries. Polk expressed the view that those cases described as cellulitis are generally salpingitis. Dr. Coe, Pathologist to Woman's Hospital, says that cellulitis, as felt and diagnosticated by the examining finger during life, can rarely be demonstrated in the autopsy.

If now such a pathological condition as described by Emmet, Priestly, Thomas, Hewitt is really present, why is it the post-mortem does not verify it by showing the existence of a pure, uncomplicated cellulitis?

Are there not patients dying in the acute stage? and if this organized exudation, this thickening of the vaginal vault, was present, should it not be demonstrated? Certainly, but as a simple, uncomplicated cellulitis, it is not there. So say the patient pathologist and the observant laparotomist. In the early stage of the disease, while yet the organs are in a state of congestion, the weight of the uterus and engorged tubes give upon digital examination the physical signs of retroversion with adhesions. Such cases are pronounced cellulitis or peritonitis, just as the hobby of the physician may be. I shall not discuss the management of acute cases, for there is nothing that can add to Dr. E.'s able therapeutics, except I prefer to use quinine and the cold coil to control the pyrexia in place of tinc. aconite, as suggested by him.

It is of chronic cases, more especially, I would speak. It is the custom to mop the cervix and vagina with iodine, carbolic acid and silver solutions. Clearly, such applications are injurious, inasmuch as they tend to produce exactly that condition which your efforts should be directed to remove—that is, they harden and toughen the tissues. In the treatment of these cases, we should select such agents as will soften the tissues, dilate the vessels, stimulate the absorbents, and, above all, support the uterus and ovaries. For this

purpose nothing equals the hot vaginal douche, and the full tamponading of the vagina with glycerine tampons, after the manner of Dr. Taliaferro. After several weeks of such treatment, you have the patient in the most favorable condition for an accurate diagnosis.

From the evidence, we may expect to find a large proportion of these patients suffering from diseased tubes and ovaries. Mr. Tait's success in such cases warrants his surgical law, but with us, unless a diagnosis is made of diseased tubes and ovaries, we should first exhaust all means of relief before opening the abdomen.

Dr. Haggard said he was not present when Dr. Ewing's paper was read, and therefore he would have to rely upon what he had gleaned from the speakers who had preceded him as to its contents. The point had been raised as to the possibility of differentiating pelvic peritonitis in the early stages of pelvic inflammation. While Courty believed it could be done, the speaker concurred with Thomas, Emmet and others, in the belief that it was impracticable, but discovery of it made very little difference since the treatment would be the same, whether the cellular tissue or the peritoneum was involved. Practically he believed both were generally involved, in the end; but that, when an area of phlogosis started in any portion of the peritoneum it spread with great rapidity, until, oftentimes, the entire peritoneal membrane became involved. He cited a case in point, which had recently been under the care of himself and Dr. T. L. Maddin, in which the acute inflammation had lingered in the pelvic cavity for several days, involving originally, as he believed, only the cellular tissue. As soon as the inflammation extended to the pelvic peritoneum it spread with great rapidity, until the entire peritoneal membrane was involved, running a severe and protracted course. The patient was a woman some 40 years' old, but had never been pregnant.

With reference to the treatment by hot water—which was almost the universal practice—he did not think physicians, as a rule, were specific enough in giving directions. To obtain the therapeutic benefit of hot water, the patient should be placed in such position as to keep the vagina filled to its utmost capacity. The water should be as hot as the patient could bear it, and it should be continued at least forty-five minutes, at least twice a day. The common practice with women of sitting over a chamber and injecting

from a quart to a half gallon of water, did an inflammation no more good than if they squirted the water at the moon.

With reference to the local treatment by the application of tampons of cotton, saturated with glycerine, it was capable of accomplishing much good, as the great affinity of glycerine for water acted as a depleting agent to the engorged blood-vessels, producing large watery discharges. But to obtain its best effect he thought with Dr. Taliaferro, who was first to introduce tamponading of the vagina, it should be packed with cotton so as to get the effect of pressure, on the same principle that the surgeon bandages a swollen limb—with the view of supporting the blood-vessels and promoting the absorption of effused fluids.

Dr. W. A. Atchison said that his observations did not corroborate the statement of Dr. Haggard, that general peritonitis commonly complicated or followed pelvic peritonitis. He had seen but a few of such cases, and in the puerperal state only. While he indorsed heartily the treatment by copious injection of hot water, morphine hypodermically, etc., mentioned by several speakers, he had much to say in favor of topical bloodletting, turpentine stupes, hot poultices and the administration of aconite, in the early stages of acute cases. They are worth more than all the antiseptics, so-called. The great object of treatment is to prevent effusion of plastic material. Aconite diminishes blood-pressure and prevents effusion. In cases of sepsis, puerperal or otherwise, quinine is a sheet-anchor, and, with generous diet and antiseptic washes, will often accomplish wonderful results. He advocates the early opening of any abscess when discovered, and thorough washing out the sac, when possible.

Dr. T. L. Maddin was much entertained by the paper read by Dr. Ewing and by the discussion provoked, and the very able manner in which it had been conducted. There seemed to be quite a difference of opinion in reference to the essential nature of the disease. Some claiming that the inflammation was mainly, if not entirely, in the peritoneum, starting in the pelvic and spreading throughout the abdominal peritoneum. Others claimed that the essential nature of the disease was located in the cellular tissue, and if the peritoneum became involved, it was secondary. Those who occupied a middle ground were doubtless nearer the truth. They believed that the inflammation might originate in either or both at the same time.

Those who have conducted many *post-mortems*, claim they find no lesions in the areolar tissue, but great destruction of the pelvic peritoneum, and every evidence of serious inflammation; while the *practitioner, in his clinical studies*, has every assurance, both subjective and objective, that the areolar tissue of the pelvis is often the only theater of the disease. Dr. Menees will call to mind a case in which I invited him in consultation, in which, with an aspirator, we emptied a pelvic abscess of about one quart of purulent matter. This was repeated several times. He will indorse me when I say there was *no evidence of peritonitis* in this case. Another patient with a large, hard and tender tumor, filling the right side of the pelvis, its base readily outlined both by vaginal and rectal examinations, mounting to the brim of the pelvis. There was not a symptom of peritonitis in the record of its clinical history. A large abscess was emptied through the vagina, the pyogenic sac refilled several times before her recovery was complete. Another case recently came under my observation. A young woman of about twenty-eight years, had a severe paroxysm of pelvic pain, which returned at short but irregular intervals, when a hard tumor was discovered, originating near the left ovary. It finally occupied almost the entire left half of the abdominal cavity. There were no symptoms representing peritonitis. Aspiration was undertaken, but failed to reach the matter; but in about seven days after it discharged through the bowel.

Such cases as these are not unusual in the experience of the practitioner, and are not to be ignored, although autopsies fail to find them; these cases are expected to recover either through resolution or suppuration. It will not do to deny them in writing or recording the pathologies of the pelvis. How, then, are we to reconcile the contradictions between the scientists who learn their lessons in the dead-room, and those who learn at the couch of the patient? The explanation which occurs to me is, cellulitis recovers when unaccompanied with peritonitis, and therefore does not give its testimony in the dead-room. I am far from saying that peritonitis and cellulitis do not jointly exist in pelvic inflammation. Within the past month, in such a case, I had the honor to be called in council by Prof. Haggard. The cellulitis had been progressing for several weeks, when a peritonitis was lighted up, and in twenty-four hours extended throughout the peritoneum. In about six days



the abscess discharged in the vagina with a slow subsidence of the peritonitis.

Nor do I deny but we may have pelvic inflammation in which the peritoneum is exclusively involved, that may or may not be either local or diffuse. Dr. Ewing claims, and cites authorities sustaining him, that the ætiological factor of disease often gets access to the peritoneum through the Fallopian tubes; that gonorrhœa thus addressing itself to the peritoneum kindles the inflammation. I conjecture that dead-house testimony, which has been presented by high authority, is furnished by such subjects. I am the more ready to believe that the route of the Fallopian tubes is the opportunity of lighting up pelvic peritonitis, when I call to mind that a most estimable lady under my care, in using a vaginal douche of warm water with a Davidson syringe, was seized with severe pelvic pain with inflammation that in twelve hours spread throughout the peritoneum, of which she died on the fourth day, without any abatement of its progress. While this is the only fatal case of pelvic peritonitis which has come under my observation originating in this way, I have more than once been summoned to similar cases which assumed dangerous and alarming expressions.

It is by no means the rule for inflammation to overleap the boundary lines of tissue limitation. If it originates in the cellular tissue, it confines its pathological expressions to that tissue, and any invasion of the peritoneum is the exception and not the rule. The reverse of this proposition is likewise true. The change in the quality of the epithelial covering of mucous membrane is, to a considerable extent, a barrier to the extension of the inflammation.

Having exhausted the time allotted me in debate, I will not be able to make any mention of treatment best adapted to pelvic inflammation, further than to say that if a case is one of cellulitis, I am in the habit of giving "muriate of ammonia." For local use I order the upper vagina to be painted once or twice each day with tinct. iodine, and then adjust cotton carrying about one ounce pure glycerine. This secures depletion of the parts—and, if indicated to allay pain, add about one-third of one grain of morphia. I order the vagina to be douched with water as warm as can be borne comfortably; but if suppuration is inevitable, then the lukewarm water is indicated, for it relaxes the blood-vessels and produces passive congestion of the blood. But if peritonitis is developed, either primary or secondary, then opium is

the sheet anchor. While this is true, the inflammation may be specific—from gonorrhœa, erysipelas, etc. This fact suggests a line of treatment addressed to its ætiological factor.

---

### Obstetrical Society of Philadelphia.

---

*Stated Meeting, Thursday, June 3d, 1886, the President, B. F. BAER, M. D., in the Chair.*

---

DR. R. P. HARRIS read for Dr. Howard A. Kelly, now in Europe, a paper entitled "Gonorrhœal Tubo-Ovarian Abscess—Right Side—Laparotomy Removal of Fallopian Tube and Ovary—Recovery." In this case, the disease of the woman could be directly traced to gonorrhœal infection on the part of the husband, although she had never, to her knowledge, had any uterine discharge other than blood, and had always been regular in her menses during the three years of her married life.

At fourteen Mrs. H. commenced to menstruate; at seventeen she weighed 135 pounds, although of medium stature, after which she failed somewhat in health from an abscess of a finger, and when married, at twenty, was quite spare, as was also her husband, both of whom are of German blood. The husband has since reached a maximum of 167 pounds. Three years before marriage, Mr. H. contracted a gonorrhœa, of which he thought himself cured in three weeks. At the time of his wedding, however, he was suffering from orchitis, which he attributed to a strain, and which lasted for some time. The sickness of his wife commenced with her first menstrual epoch, two weeks after marriage, at which she had excessive abdominal pains, fever, vomiting and constipation, and was two weeks in bed; since which time she has had repeated attacks of the same kind.

She came under the care of Dr. Kelly on March 31, 1886, after having been under treatment for a supposed uterine fibroid during five months. After a month's preparation by enemata, vaginal douches and tonics, it was determined to operate upon her for the removal of a tumor, located between right side of the uterus and the pelvis, and evidently firmly attached in its seat. This tumor had an elastic feel; had greatly affected the health of the patient by the production of menstrual prolongation and excess, and was evidently giving rise to symptoms of septicæmia.

The tumor was removed May 5, 1886, and in separating it from its bed, a small cyst containing fetid pus was ruptured; this necessitated irrigation and cleansing of the viscera with hot distilled water, to avoid septic peritonitis. The pulse rose to 160 the next day, but fell in four days to 76, with a temperature of 98.8°. When examined after removal, the tumor, which was about 2½ inches in diameter, was found to consist of an ovary and dilated Fallopian tube, forming a common cavity filled with from two to three ounces of thin, greenish, highly fetid pus.

A draining tube was used for four days; the sutures removed in a week. The patient made good recovery.

#### OVARIAN TUMOR.

Dr. T. M. Drysdale exhibited the specimen, and remarked: Five weeks ago I removed an ovarian tumor which, apart from the interest which attaches to each case of this kind, was personally important to me, from the fact that it completed my one hundred and fiftieth ovariectomy. Twenty-five years since, April 23, 1861, I performed my first operation of this kind. At that time, as you are aware, the procedure was not in such favor in the profession as it now is, and the operators were few. In fact, I believe I was the first, after the late Dr. Washington L. Atlee, who operated in this city.

My success has been encouraging. In each series of fifty, the mortality has grown less and the results more and more satisfactory, but, as I expect to present a report of the whole number of cases to you in a short time, I will not now anticipate what will then be stated in regard to these results further than to say that of the one hundred and fifty cases I have not lost twenty.

This tumor was removed from an unmarried lady, twenty years of age, who first consulted me in February for an abdominal enlargement. She was extremely thin and delicate-looking, but said she had enjoyed good health until attacked by the present disease; since then she had emaciated rapidly, her general health had failed, her stomach had become irritable, and her appetite deficient. She had an unnaturally red tongue, and a feeble pulse, which varied from 110 to 140 beats in a minute.

She first menstruated when sixteen years of age, with great pain and excessive flow. Since then she had always suffered agonizing pain during menstruation, but had been

regular until within the last six months; during this time she changed every two weeks, flowing for two or three days. For the last month she had a thin, sanguineous discharge every week.

She first noticed enlargement about eighteen months before I saw her. The whole abdomen swelled as if distended with wind, for which it was mistaken, her physicians treating her for a long time for dyspepsia. The increase in size has been very rapid in the last six months. On examination, the abdomen was found to measure thirty-seven inches around its greatest circumference and was distended by a tumor of irregular shape and consistency. There was dullness on percussion everywhere except in the epigastric region and over the right flank. No fluctuation could be detected except over a small portion in the left side, about the level of the umbilicus, which was evidently cystic. A hard mass could be felt just below this, which appeared like an independent growth. On vaginal examination, the cervix uteri was found to be small and flattened against the pubic bone by a hard tumor which nearly filled the pelvis. This mass was found to be continuous with that which was felt to the left of the umbilicus. It was impossible to pass a uterine sound.

I diagnosticated a multilocular ovarian tumor. Assisted by my son, Drs. W. S. Stewart, John S. Stewart and G. G. Chamberlin, of Middleton, Del., I operated April 28th. On opening the abdomen, the front of the tumor was seen to be covered by the right broad ligament, which was spread out to a great size and firmly adherent to it. The uterus was turned completely on its axis and fixed by adhesions to the left side of the growth. A large trocar was introduced, but no fluid could be obtained until a cyst was reached high up on the left side. The remainder of the mass was composed of minute cysts and a nearly solid portion, which was that felt in the pelvis and left side before the operation. An incision was made in the wall of the tumor, and, introducing the hand, the interior was broken up as much as possible, yet it was difficult to reduce its size, and I was compelled to enlarge the abdominal incision to about eight inches in length before I could get the tumor through it. The adhesions to the broad ligaments and uterus were then detached, as well as some omental adhesions; others to the wall of the right side of the pelvis still held firmly. These were finally broken down and the



tumor, which proved to be of the right ovary, withdrawn. The pedicle, which was very thick and vascular, was secured by ligatures. From the surface of the adhesions there was an active and persistent bleeding, which gave considerable trouble, but this was controlled without the use of ligatures, except two to vessels deep in the pelvis. After thoroughly cleansing the cavity of the abdomen and pelvis, the wound was closed with wire sutures; a compress of absorbent cotton and a flannel bandage completed the dressing. I will not weary you with the details of her progress toward recovery. The only unpleasant symptoms she had were vomiting and violent colicky pains, which lasted at intervals for two days. Her highest temperature in the axilla was  $101\frac{1}{2}$ . Her pulse varied from 100 to 128. She has entirely recovered, and is daily gaining strength.

W. H. H. GITHENS, *Secretary*.

---

## Selections.

---

### On Some Unusual and Beneficial Effects of Iodide of Potassium.

---

BY DR. EDMOND SOUCHON,

Professor of Anatomy and of Clinical Surgery, Tulane University of Louisiana.

---

I. *In Secondary Syphilis*.—We all know the remarkable effects of iodide of potassium in the tertiary period of syphilis, and also its action on the muscular pains of the incipient stage of the disease, but it is seldom that we see as remarkable an action as the following in the second stage:

Mr. R. S., aged twenty-five, with a fine, stout constitution, contracted a case of syphilis, the primary symptoms of which presenting nothing unusual. Upon reaching the middle of the third month of the disease, his whole body became covered with a most marked flat papular eruption; some of the papules being as large and as thick as silver five-cent pieces, others of a dime and a nickel. The proto-iodide of mercury, which he had been taking in moderate doses, was increased, so as to have a decided effect upon the gums and to produce slight salivation, and at the same

time he was taking cinchonia and iron. But it was all without any result. The papules continued enlarging, and then they ulcerated, some of them becoming as large as a silver quarter. Feeling very much for the poor patient, who was at the same time a good friend of mine, I was wondering what more I could do at this stage of the disease, and I could think of nothing else but to try iodide of potassium in gradually increased doses. I barely expected very much from this treatment, as it was at so early a stage of the disease. The patient had taken thirty grains a day for only a short time when, to my very great astonishment and delight, the ulcerating process was stopped and the sores assumed a healthier color; at the same time his general health was being much improved. The treatment was continued, and at the end of four weeks all the ulcerated papules were healed, and never returned.

I can also recall now the terrible case of a distinguished young gynecologist and surgeon, who had been inoculated while making a vaginal examination. In a few weeks he developed such extensive mouth and throat symptoms as to be unable to swallow scarcely any food, not even fluids. As a consequence he lost flesh rapidly, and as the larynx was threatened to be so obstructed as to interfere with his breathing, his friends were much concerned. He was taking as large doses of bichloride of mercury as he could stand, and still there was no change in his condition. Upon talking of his trouble with another confrere, he was advised to add good doses of iodide of potassium to his mercury. He did so, and he had only taken it a few days when a marvelous change took place in all of the symptoms. They abated to such a degree in a fortnight's time as to allow him to eat a hearty meal, though with some little pain, which he had not done for many long weeks.

These two cases show how important it is to give iodide of potassium in the earliest stage of the disease, if the case does not progress satisfactorily. In fact, I very often give the mixed treatment from the very moment my diagnosis is positively made.

2. *In Glandular Enlargement of the Neck.*—Many physicians know the good effects of iodide of potassium in glandular enlargements of the neck, but many also do not know it, or do not appreciate its value, as is shown by the remarkable case of a colored man who was sent to me from the country to have removed a number of enlarged glands

from the sides of the neck, but on one side particularly. I admitted him in my ward, in the Charity Hospital, and put him on large doses of iodide of potassium. In a few days the glands began to go down, and had disappeared after the eighth week, though leaving some induration. I sent him home apparently well as he could be. However, I learned that a few months after his return to the country the glands began to swell again; but his physician, who now understood the value of iodide of potassium in such cases, administered the drug freely, with the same result as in the first instance. There was no relapse after this.

3. *In Chronic Traumatic Swelling of the Leg.*—A young colored man, about twenty-four, got hurt by the fall of a steamboat stage on his right leg. Fortunately, nothing was broken or dislocated but the knee, and then the limb became very much swollen. His physician was called in as soon as he had been removed to his house and treated him appropriately. The acute symptoms disappeared in due course of time, but there remained a stiffness of the joint which was painful, and a general swelling of the whole limb, which had resisted all frictions and roller bandages. I was sent for at the end of the second month, and found the above described condition of things. There was no cause for surgical interference, and not knowing exactly what to do, and to do something I put him on iodide of potassium, giving him first ten, then fifteen and twenty grains three times a day. He had barely been taking it a week when he began to show signs of improvement. At the end of the third week I was sent for, to see how much the limb had gone down. Finally, at the end of the sixth or eighth week it had disappeared altogether. The knee, however, remained stiff for a long time afterward.

4. *In Chronic Sciatic Neuralgia.*—Last January I was consulted at my office by a young man, who was an engineer by trade, and had been taking off the crop on a plantation near Donaldsonville. He related that during all the grinding he had suffered terribly, but intermittently, from sciatic neuralgia, the symptoms of which he described very well. He had been under treatment all the time, had been given the usual remedies in such cases, including large blisters and hypodermic injections of morphine. It relieved him but did not cure him. Having secured his crop, he came to the city, with a letter from his employer to me, and asked me to do something that had not been done before, to re-

lieve him. He had previously consulted two of the very best surgeons in the city, who had done him no good, and upon the mention of the talent he had applied to I was quite at a loss to do better than they had done. All at once I remembered having read somewhere that iodide of potassium had succeeded in cases of protracted sciatica, though it was not so good in other neuralgias. I ordered him an ounce of iodide of potassium in a wine bottle of water, and told him to take of this a tablespoonful three times a day. I had asked him to report at the office, but several weeks elapsed and he had not come. When I met him one day on the street, he told me then that after taking the medicine a few days he began to feel better, and was well before the bottle was empty; and as he suffered no more, saw no reason to call again at the office.—*Medical Herald, Louisville.*

---

### Severe and Persistent Hemorrhage from the Gums Following the Extraction of Teeth.

---

Reported by Dr. John H. Crawford, of Bardstown, Ky.

ON the 14th day of April, 1886, Mr. S. removed two teeth from the mouth of his seven-year-old son with his fingers—an incisor and one canine. Profuse bleeding followed the removal of the teeth. After using the ordinary domestic remedies for the arrest of such bleeding, and failing to stop the flow, the father became alarmed and sent for Dr. A. Crawford. When the doctor arrived he found the child with a pulse of 130 per minute, pallid and cold surface, with some nausea. Warm applications were made to the extremities, and a dilute solution of Monsel's solution applied to the bleeding surface. This did little or no good, and the compress was removed from the gums and Monsel's solution (full strength) was applied; this checked the bleeding for a short time only. Ergot and dilute sulphuric acid were given internally. This treatment was continued until the morning of the 16th, with almost negative result, the oozing being persistent. Cocaine was then tried with similar results, in the way of arresting the hemorrhage.

The boy was losing about four ounces of blood in twenty four hours, which made him weak, nervous, and sleepless. At this time a saturated solution of tannic acid and listerine



was used, which arrested the bleeding for a few hours. The hemorrhage recurring again, it was thought advisable to have consultation. Drs. Coomes and Marvin were consulted by telephone, when a number of remedies were suggested, but all had been tried except the actual cautery, which I applied, having been called to see the case with my father.

The cauterization was followed by no better results than the other agents that had been used. On the 17th a saturated solution of the sulphate of iron and alum was applied with compress of cotton-wool. The pressure was kept up all day, and by night the bleeding had almost ceased.

On the 18th, after the gums had ceased to bleed, free hemorrhage from the nose occurred. The iron and alum solution were used in the nose and the hemorrhage soon checked. There was no bleeding after this time, and with good diet and free supply of iron the patient recuperated very rapidly.

It would seem but fair to infer that this child had inherited the diathesis from its mother, who is of that diathesis herself. In all probability the arrest of the bleeding in this case was largely due to the impaction of the cotton fibres into the open surface, acting as a kind of artificial fibrin, mechanically plugging the mouths of the open vessels.—*Medical Herald, Louisville.*

---

### The Dietetic Value of Water.

---

By GEORGE B. FOWLER, M. D., Prof. Clin. Chem., N. Y. Polyclinic, etc.

---

WATER is the essential element for the manifestation of physiological phenomena. Hoppe-Seyler very aptly says that all organisms are surrounded by running water.

I venture the statement that the cause of one-fourth the cases of disordered digestion in fashionable life is a lack of sufficient water in the dietary. It has become customary with men to substitute at their meals wines and liquors, and women, if they do not indulge in these, draw the line at a few sips of ice-water, fearing, as they say, that water freely indulged in will produce obesity, or, by diluting the digestive fluids, induce dyspepsia. I am aware that such doctrines have been promulgated by high authorities, but am nevertheless firmly convinced that they are pernicious falla-

cies. It only needs a little common sense and observation to controvert them.

The habitual substitution of wines, malt liquors, etc., for water is pretty sure in the long run to result in evil, in the majority of cases. For, in the first place, where pure or undiluted wine is drunk the individual is not disposed to take enough to supply the system with the requisite amount of fluid, and if he should, everything is upset by the pernicious effect of the contained alcohol. Beer, though containing less alcohol, is open to the same general objections. It should never permanently, or for any lengthened period, be allowed to take place of pure water. All these beverages are unnatural solvents; besides water they contain many ingredients intolerant to most alimentary canals. Especially is this true in those persons already suffering from deranged digestion.

Water taken at meals in quantities sufficient to satisfy the thirst acts only beneficially. Indeed, an excess will not hurt; for it is quickly absorbed, and increasing the blood pressure favors digestion by thus inducing a freer flow of the juices. It is a digestive agent as well as food. By the liberal use of water as a beverage, the feces are rendered of proper consistency, the intestines maintain their normal activity, and constipation is avoided. The passage of from thirty-five to fifty ounces of urine each day, the result of the ingestion of pure water, tends to keep the kidneys and urinary passages clear of concretions and morbid changes, and with the skin and lungs equally active, the bodily house is well swept. The same result is impossible with artificial beverages. He who stints himself in the drinking of water is dirty inside.

---

### Typhoid Fever.

---

BY J. P. THOMAS, M. D., OF PEMBROKE, KY.

---

My location is in a salubrious and comparatively wealthy district, where cleanliness is the rule, and may have given me but few opportunities to trace the disease—even in its epidemic form—to any of the various sources mentioned by writers as “the invariable cause of it,” such as drainage from privies and cesspools into the water supply, etc., as nearly every homestead is surrounded by ample territory to enable

the owner to place these depositories sufficiently distant from the cistern, which is the source from which the majority procure their drinking-water, and but few have pits that are not cleaned weekly or monthly, and a plentiful supply of lime is applied to disinfect them.

I do not believe the assertion "that typhoid fever never appears in any locality previously free from it, unless a case be imported." Hundreds of country practitioners could be called as witnesses to disprove this statement. I have, in an experience of thirty years in my present location, seen but two outbreaks of the disease where, after the most painstaking investigation, the origin of the disease could be reasonably traced to any special source.

The first was in 1870, when, I may safely say, an outbreak of the disease was traced—as it occurred in one family, consisting of seven members—to the drainage from a negro graveyard into the well from which this family obtained their drinking-water. Every member of the family, one after another, was stricken down with the disease in its most severe form.

As soon as this condition of the water-supply was discovered, the drinking and cooking water was procured from a neighboring cistern, and, after a duration ranging from six to twelve weeks, every one recovered.

The second occurred last fall, and continued nearly through the entire winter, in the family of Mr. James Clardy.

His family consisted of nine members, seven of which had the disease, including Mr. Clardy himself among the number attacked, the mother and eldest child escaping. The escape of the mother was somewhat remarkable, as she was constantly, with but the smallest amount of rest, nursing every case from beginning to convalescence.

But the only discoverable cause for this outbreak was a flower-pit, located against the wall of the south side of the house, which was built of brick, without a cellar, but considerable space from sleepers to ground. I informed Mr. Clardy that the pit was perhaps the cause of the disease in the family. He had it filled up level with the surrounding yard and sodded with turf; but only after the sixth case I was informed by him that when the man employed to fill it up opened the closed apertures, the stench was almost intolerable.

Though I have treated several endemics of typhoid fever, and invariably tried to discover their origins, with these two

exceptions I have failed to find any reasonable cause for their development—never from an imported case.

I have seen many cases of typhoid that run a typical course, and from first to last exhibited none of the pathognomic, rose-colored spots, that had no brown-coated, fissured, or red-tipped tongue, and but little, if any, abdominal disturbance. There are many cases of continued fever, called typho-malarial fever, winter fever, autumnal fever, etc., that are all genuine typhoid fever; but because all the symptoms are not present that we have been taught to expect in every case, some other name is adopted for this class of cases.

There is, of course, no such disease as typho-malarial fever; but there are many cases of true typhoid fever developed at a time when there is what we term "malaria" in the system, and the typhoid element is engrafted on the so-called malarial element, but, being the most powerful, it marks the latter. I have seen many such cases, and the seven cases before referred to in Mr. Clardy's family were all of this class; and, as stated by Bartholow, the typhoid element did in these cases, and will in all cases complicated with a malarial element, overshadow and cause to be dormant the malarial element until the typhoid runs its course. But in all such cases, when it has exhausted itself, or been aborted by treatment, then the malarial element will assert itself, and we have a simple case of remittent fever.

No amount of quinia will affect in the least either element as long as the typhoid predominates; but as soon as it subsides, then the liberal use of quinia will establish permanent convalescence.—*Medical Herald*.

---

## The Prevention of Communicable Diseases.

---

DR. J. M. ANDERS made the Prevention of Communicable Diseases the subject of an address before the Pennsylvania State Medical Society.

The chances for successful prophylaxis of infectious diseases are greatly increased, he said, in those instances in which the specific organism has been isolated to which the infectious quality is due. The demonstration of the specific cause of a disease often leads, by inciting further study, to the attainment of certain knowledge concerning the indispensable conditions for its development and multiplication.



Communicable diseases are in great measure preventable, provided that the known principles of hygiene are rigidly enforced.

The list of communicable diseases is long and varied, and in recent times has been added that scourge of humanity—phthisis. In general this class of affections has a common mode of dissemination, viz., by contagion, by infection, or both, though in varying degrees. As a corollary, there are certain leading principles looking to their prevention, which principles are applicable to them as a class, and they may be conveniently considered under three heads. First, isolation of the patient; secondly, atmospheric purification by disinfection and ventilation; thirdly, purity of the water supply.

What does proper isolation consist in? Not merely in placing the patient in a separate apartment, having been occupied by other members of the household, but a special room should be set apart for this class of invalids in every comfortable family. Densely-populated centres should afford fever-hospitals. There are few human interests which could be more successfully promoted by an enlightened public sentiment than the proper isolation of those ill with infectious diseases. There are certain indisputable facts opposing the practicability of complete disinfection of ordinary living-rooms after being used for a patient suffering with a contagious disease. Thus, Prof. Tyndall found by experiment that the air of inclosed boxes at the end of three days no longer swarmed with the microscopical particles which were always found to be suspended in ordinary air. These had all attached themselves to the sides of the boxes. Experiments also show that air-borne bodies have no affinity for organic surfaces. The matters floating in the air of a closed room tend to attach themselves to the side walls, floor and ceiling. Hence to disinfect such rooms thoroughly it would become necessary to remove all paper from the wall. He pointed out the superior advantages of the sick-chamber, especially set apart for communicable diseases. Free ventilation is urged. The observations of M. W. Power have also shown that during the almost absolute stillness of the deposit of dew and hoarfrost particulate matter is most actively disseminating itself through the atmosphere, and further suggested the best modes of obviating such meteorological phenomena. The medical profession would do well to adopt speedily the measures recommended by a commit-

tee on disinfection of the American Public Health Association.

The conclusions arrived at by this committee show the complete efficacy, both of the heat methods and the chemical disinfectants, to free the atmosphere from air-borne organic impurities, and from micro-organisms, and from organisms causing diseases. So long as the efforts of mycologists to isolate the specific organism causing typhoid fever and cholera are unavailing, conclusive results can not be expected from water-analysis. But that impure water is frequently responsible for outbreaks of the above and other diseases is no longer problematic; the subject can now be studied only from the side of practical experience. Finally, the lecturer pointed out the superior advantages of the bill recently introduced into the House of Representatives, having for its object the establishment of a National Health Bureau.

---

### Treatment of Empyema.

---

MR. R. J. GODLEE (*Lancet*, January, 1886,) reviews the whole subject in two interesting lectures. He points out how much the age of the patient influences the prognosis, children both recovering from the various operations and disposing of residues of pus more easily than do adults, and he records several cases among the former in which a single aspiration effected a permanent cure. If, however, aspiration has been employed several times without success, he advocates freely opening the cavity a little below and outside the lower angle of the scapula, at the same time excising part of the eighth or ninth rib. Sometimes the pyogenic membrane is scraped away, at other times iodine solution is injected, but the occasional danger of both measures hinders their being considered always as advisable. The use of iodoform or other antiseptics is strongly urged. Mr. Godlee has already performed Estlander's operation, and prefers to remove the thickened periosteum as well as the ribs, the danger of hemorrhage from the intercostal vessels being insignificant. In one case, parts measuring two inches each were removed from five ribs, with a good result.

In children, an attempt to dispense with drainage may be made much sooner than in adults, in whom the tube should

be worn as long as pus continues to discharge. Patients with chronic phthisis and empyema should not be operated on unless the latter condition is causing much inconvenience; the same applies to cases in which the cavity is quietly discharging its contents through the bronchi.

Dr. Fischer, of Strassburg (*Centralbl. f. Chir.*, November 28, 1885), advises that the opening should be made in the seventh or eighth intercostal space in the line of the scapula (in this practically agreeing with Mr. Godlee), and invariably excises part of a rib at the same time. He employs injections (by preference one containing chloride of zinc) only if the pus is foul, and uses wood wool as a dressing. Resection of several ribs is only justifiable when the patient has been allowed to get about for some time, and the cavity shows no signs of closing.

In a record of forty cases Cormack (*These de Paris*, 1885,) gives ten fatal results of Estlander's operation, and the same number of complete cures. The procedure is best undertaken after an interval of from six to twelve months from the formation of the fistula. A very large cavity, extensive tuberculosis and communication with a bronchus are contraindications.

Dr. Maclaren (*British Medical Journal*, January 23, 1886,) successfully removed parts of six ribs in a boy of eighteen, and suggests that the cartilages may also be divided in cases in which diminution of the cavity is aimed at.

Rose, of Berlin, has lately excised parts of eight ribs from a patient with empyema, with a successful result.—*American Journal of the Medical Sciences*.

---

### A Hint on the Treatment of Ringworm.

---

DR. R. W. LEFTWICH writes to the *Lancet*, February 6, 1886:

"Last August, a lady asked me to examine her nurse-maid's head. I did so, and found a well-marked patch of ringworm, about an inch and a half in diameter. The mistress was naturally unwilling to expose the contagion to her children, who presented no sign of the disorder, and almost equally unwilling to part with the girl for a time. After some reflection, I told her I thought the difficulty might be gotten over with only very slight risk of the children, and treated the case in the following way: Having cut the hair

close to the scalp, all round the patch, I first painted it with an alcoholic solution of iodide of mercury—an old-fashioned but excellent remedy, obtained by adding calomel to tincture of iodine, and using the supernatant colorless fluid. As soon as the slight soreness it had produced had passed off, I applied an iodine plaster obtained from a formula in Beasley's book, and attributed to Roderburg, an ounce of the plaster containing a half dram of solid iodine. This, spread on kid, was carefully applied to the patch, which it overlapped all round. At the end of a fortnight it was removed, and the ringworm appeared practically cured. To make sure, however, it was again painted with the above-mentioned solution, and a fresh plaster applied for another fortnight. Upon being taken off, the whole surface of the patch was found covered with short hairs. No other patch had made its appearance upon the head or elsewhere, and not one of the three children, with whom the patient was in daily and hourly contact, took the complaint. Possibly the plaster alone would have been sufficient, but I thought it safer to use the paint in addition, and I feared that if I used a more powerful plaster the irritation might tempt the patient to remove it. I might also have used a plaster containing oleate of mercury, but doubted whether it could be made sufficiently adhesive. The advantages of this mode of treatment are obvious enough, for, by its means, the risk of the disease being spread by actual contact, by means of caps, and by the common use of hair-brushes, is reduced to a minimum. I find no allusion to this method in the ordinary works on the subject, and therefore infer that, if new, it is not widely known."

---

### Uterine Neuroses.

---

BY GRAILY HEWITT, M.D., F.R.C.P.

---

GENTLEMEN:—The subject with which it is proposed now to deal, is the "neuroses of the uterus."

As a preliminary, it is necessary to define the term "uterine neurosis."

It may be considered impossible, with the knowledge in our possession, to define, in a conclusive and accurate manner, what constitutes a uterine neurosis. This circumstance, however, is an argument for a discussion of the



subject, and for the necessity of an endeavor to arrive at some satisfactory generalization. At the outset we are met with the difficulty of deciding how far certain symptoms have their origin in a morbid condition of (*a*) the nervous centers, (*b*) the uterus, or (*c*) the ovaries, or (*d*) of abnormal conditions of two or more of these elements in coexistence and combination. The facts which are adducible have led different observers to different conclusions, as to the primary or principal and dominant pathological factor. For some the uterine neuroses are merely evidence of a constitutional or general disturbance. For others the uterus is the organ affected. And in the estimation of a third set of opinions, the ovaries are the *fons et origo mali*.

There can be little doubt that the mistakes which have been made, and the difficulties which have been encountered in dealing with this really difficult subject, have arisen principally from a too exclusive attention to one or other of the elements, the general and the particular; the general represented by those who regard the uterus and ovaries as dominated by the other organs of the body; and the particular by those who neglect the general, and explain everything by the local disorder of the generative organs (uterus or ovary).

Careful clinical study of cases leads to the conviction that most cases are of a very mixed kind, and that local alteration or disease is rarely witnessed, unless in conjunction with a more general one. Those diseases which may be included in the term "uterine neuroses" are, as can be shown by anatomizing them, very forcible evidences of the truth of this generalization. A general feebleness is in many instances the basis, as well as the accompaniment of more strictly local pathological changes. The nervous affections of the uterus are, it may be said, in a fair way of becoming better understood, in consequence of the more exact attention which has recently been given by Dr. Weir Mitchell, Dr. Gowers and other neuro-pathologists to the condition of the nutrition of the nervous centers in cases of nervous disease, a kind of investigation which bids fair to throw a flood of light on a previously obscure subject.

Seeing that, as above stated, the study of the neuroses of the uterus implies a careful study of the condition of the nervous centers, which constitute a part of the apparatus whose action is disturbed, it will be at once seen that the general "feebleness" or weakness, which precedes and

mostly accompanies, and is an essential part of uterine neuroses, is likely, nay, certain, to be only another term for defective nutrition of the nerve-centers.

The so-called "functional" nervous diseases can be shown to be largely due to a tangible anatomical alteration of the nerve centers, namely, impaired nutrition. This explanation offers a substantial confirmation of the accuracy of certain conclusions which clinical experience and observation had led me to adopt in speaking of the general interpretation of hysterical phenomena, and which will be found described in the fourth edition of my work on *Diseases of Women*, p. 559, in the chapters devoted to the consideration of the hysteroneuroses, as the following quotation will show: "It is extremely probable that the predisposing condition is always a state of defective nutrition of the nerve-centers, for the individuals affected, for the most part, present other strong evidence of general feebleness, weakness and want of power. Moreover, there is usually a history of previous inappetency and such quantitative defects in the dietary as would be likely to give rise to a starved condition of the frame generally."

As regards the respective clinical importance of the pathological conditions of the uterus and the ovary, the numerous and brilliant results obtained by the surgical removal of the "uterine appendages," in relieving patients of certain troublesome symptoms, appear to threaten to have the effect of leading to an undervaluation of the importance of the uterine factor. That a neurosis, apparently uterine, is removed, or removable, by these mutilating (I use the word in no offensive sense) operations, does not, of course, prove that such operations are necessary for the cure of the neurosis. No doubt there are cases in which the neurosis is of uterine origin, but, from its stubbornness and misery-producing character, renders the operation in question justifiable. And I am not, of course, contesting the propriety of an ovarian extirpation when the ovaries are themselves so diseased as to be useless for functional purposes.

The uterus is subordinate to the ovaries in the sense that it apparently derives its power of irritating the system from the ovaries. Functionally, the uterus comes to an end when the ovaries are destroyed or removed; but it is certain that the uterus is endowed with a high and, in a sense, an independent organization, and that various pathological conditions of the uterus have great disturbing capabilities, and that

these disturbances may be present with a healthy condition of the ovaries.

The uterus is, in a state of health, but slightly sensitive to the touch and cutting operations, such as repair of lacerations of the cervix are even sometimes performed without the aid of anæsthesia. The lining of the uterus appears to be, however, somewhat sensitive in a state of health; and particularly at the fundus uteri, the touch of the point of the uterine sound usually occasions a certain degree of pain. It is stated by some authorities that the internal os uteri is very sensitive, but this is not my experience in cases where the uterus is in a healthy condition; but the uterus manifests great sensitiveness when in a state of acute congestion, a condition rarely witnessed, I believe, except in association with marked flexion, and under such circumstances the slightest touch occasions severe pain. The lining of the uterus seems to be the part which exhibits this undue sensitiveness more particularly, but it is usually more intense at one part than at another; the internal os uteri is often the most sensitive part in cases of congestion. Under these circumstances it is not uncommon, also, to meet with considerable sensitiveness of the ostium vaginæ, due in part to the fact that the congestion affects the vessels at the ostium vaginæ, in part, possibly, to other causes. Undue sensitiveness of the uterus to the touch is also liable to be observed when the organ is in a state of chronic congestion, and these chronic changes in the walls of the uterus, or its lining, metritis or endometritis, or both, would be considered by many pathologists to be present. The blood-vessels of the uterus, including its lining, are, in such cases, filled with blood to an undue extent, and the pain is due to pressure on the nerves resulting from the engorgement, or from the exudation of fluid between the tissues, and, later on, when the congestion is chronic, resulting from proliferation of the connective tissues, whereby the bulk is increased and the nerve-compression intensified.

Coupled usually, as I believe, with undue sensitiveness to touch, the uterus sometimes evinces extreme sensitiveness in a reflex way, the result being the appearance of reflex phenomena. To these reflex phenomena I wish to direct your particular attention. They are of the greatest possible interest, and their nature has excited at all times great discussion. These are the hystero-neuroses, concerning which, as already stated, diverse ideas are entertained, some believ-

ing they depend on ovarian, others on uterine, irritation. At first sight the term hysteroneuroses would appear to imply a uterine origin of the phenomena in question; but the words hysteria or hysterical are also used by some who have no idea of uterine origin at all, but consider the ovary as the source of irritation.

The word "hysteria," it may be here remarked, is one which has been very vaguely employed. Hysteria means for some an intentional simulation of disease, a sort of malingering; for others it is a morbid emotionality. Some appear to regard it as a kind of repressed or excessive sexual manifestation; for others it is presence of symptoms which do not indicate organic disease, but which may simulate such disease; while for many others, including M. Charcot, of Paris, it is a disease having very marked and characteristic signs and symptoms, and not by any means limited to the female sex.

There are, at all events, two principal series of cases to which, in my humble judgment, the term hysteroneurosis properly applies, and which clinical observation of actual cases has led me to set down as clearly hysteroneuroses—that is, nervous disturbances excited in a reflex way by the uterus; namely, *a*, nausea or vomiting associated with uterine disease; and *b*, liability to what are termed hysterical attacks of the more ordinary kind. There are some other instances of reflex symptoms which might be cited, but at present I wish to direct attention to the two sets of cases above mentioned.

The designation hysteroneurosis which I propose to employ is one suggested by Englemann. Under it will be included such reflex phenomena as appear to be produced by means of an irritation originating in the uterus. The wider question, as to what is "hysteria," is a distinct question, and will be incidentally considered later on.

#### NAUSEA OR VOMITING OF UTERINE ORIGIN.

It is well known that one of the common symptoms of the presence of pregnancy is nausea or vomiting, which symptoms are invariably ascribed to the changes produced by pregnancy in the uterus, although as to the precise manner in which the gravid uterus acts as the excitor of the sickness, there is no universally accepted explanation. It is generally believed, however, that the sickness is a reflex manifestation of irritation in the uterus.



Further, it is known that, in the non-gravid state, nausea and vomiting are occasionally witnessed in cases where the uterus is in a morbid condition; and the term "uterine sickness" is employed to designate it, implying the admission that the sickness is the result of an irritation in the uterus. Respecting this latter class of cases, however, there is less unanimity in regard to the uterine factor; some authorities entertaining the belief that the sickness depends, in such cases, on an irritation of the ovaries. Further, it is undoubted that an irritation in the ovary may give rise to sickness; and those who would argue for an ovarian source might, with some show of reason, adduce the familiar fact of a blow or injury of the testes producing sickness in the male, as an analogical argument for the presence of ovarian disease as a probable source of vomiting in the female sex. But, although it is doubtless true that marked sickness may be traced to the ovary rather than to the uterus in certain cases, experience strongly favors the view that the uterus is the primary irritating agent in most instances. The presence of sensitiveness to the touch is one of the tests by which this question would be determined in a given case; for, assuming that this sickness was a reflex sickness, due either to the ovary or the uterus, the presence of tenderness in the ovary and absence of tenderness in the uterus, would undoubtedly be an argument for the ovarian source of the reflex symptoms and *vice versa*. My own experience is, that the reflex symptoms now under discussion are almost invariably associated with and, I believe, dependent upon abnormal conditions of the uterus, consisting of undue softness, congestion and alteration of shape—all more or less associated. I have observed the conjunction of these factors, so very common in such cases, as to show, in my opinion, that there is a very decided causal relation between them and the reflex symptom—vomiting; while the evidence obtainable has been, so far as the ovary is concerned, to give a negative to the idea that the sickness was of ovarian origin.

The uterus is not always soft. It presents a condition varying in different cases. When the case is of recent origin the uterus is commonly soft and quite wanting in resistance. There is, in most cases, congestion, which is usually of a subacute or of a chronic character; there is sometimes enlargement, when the case has assumed a chronic character; this hypertrophy affecting often the whole organ.

The flexion is generally well marked, and of the second or third degree. In some cases the uterus has become unduly hard; the organ resists an attempt to straighten it, which resistance is due to the hypertrophic hardened state of the uterine walls. Moreover, the uterus, as a whole, is usually less movable than usual, and is altogether nearer the pelvic floor than it should be; indeed, in cases of retroflexion, and in certain cases of antelexion, it may be found to be separated from the coccyx by hardly more than a quarter of an inch.

I have met with a few instances in which severe vomiting was evidently due to the presence of small fibroid growths in the uterine parietes, and this it is important to bear in mind in attempting any generalization on the subject; but, in proportion to the other causes mentioned, this is a cause of severe vomiting which is comparatively rare.

Attentive observations of many of these cases led me to observe the great effect of movements of the body, of exertions, of physical efforts, such as would be likely to produce a downward pressure on the uterus, and thus calculated to aggravate or increase or produce a physical pushing downward of the uterine fundus; and when it was found that, almost invariably, the patient suffered from increase of sickness in consequence of such exertions or movements, when it was found that increase of such movements did actually produce at one and the same time sickness and increased flexion or displacement of the uterus, it was reasonable to conclude that the increase in the degree of the flexion was an important factor in the production of the sickness.

The most conclusive argument adducible in regard to the action of displacement of the uterus in giving rise to vomiting, is the cessation of the sickness observed to follow the partial or complete restoration of the uterus to a more normal position. In severe cases the patient would, under such circumstances, usually be made to rest in bed, at the same time that other measures were being taken to give relief by a mechanical treatment of the displaced uterus. Here it might be fairly urged—and the argument has been freely used—that the rest in the recumbent position is the real healing agent. But there have been many instances which have fallen under my notice, in which the patient, suffering from troublesome nausea, due, as I believed, to a flexion and displacement, has been treated by a suitable

peccary, and allowed to go about as usual, and in which, nevertheless, the sickness has forthwith ceased. In these latter cases, in fact, the only remedial measure was mechanical support to the uterus, with complete freedom of locomotion of the body generally, and there could be no other explanation of the result than the one which is here given.—*British Med. Jour.*

## Microscopy.

### The San Francisco Microscopical Society—*Bacillus Lepre*.

Reported for the CINCINNATI MEDICAL NEWS by A. H. BRECKENFELD,  
Recording Secretary.

THE announcement of an unusually attractive programme drew together a large attendance at the meeting of the San Francisco Microscopical Society, July 14th. In addition to the members of the society, a large number of prominent physicians were present. Vice-President Wickson occupied the chair.

After the exhibition of various interesting objects under the microscope, the lecturer of the evening, Dr. Arning, was introduced. He stated that he was about returning to Europe, after sojourning for a number of years in the Hawaiian Islands for the express purpose of studying that mysterious disease—leprosy. Alluding to the difficulties surrounding researches of this kind in a comparatively uncivilized country, far from the great scientific centers, he said that while his investigations had revealed many important and interesting facts, yet in some respects his attempts had been baffled. A long search for a possible source of dissemination of the germ of leprosy in food, water, etc., was unsuccessful. The distinctive micro-organism of leprosy is a minute rodlike fungus—*Bacillus lepre*. Hansen, a Norwegian investigator, seems to have been the first to discover this bacillus. He found it abundantly in leprous tubercles, and announced the fact in 1879. Since that time Neisser, Koch, Unna and others have confirmed and extended the observations of Hansen. These bacilli are slender, non-motile rods, about half as long as the diameter of a human red corpuscle. In uncolored sections they are nearly or

quite invisible, even under high amplifications, but where appropriate staining processes are employed, they can be rendered beautifully distinct. In form and size they very closely resemble the bacillus of consumption (*Bacillus tuberculosis*)—so closely indeed, that the distinction by mere inspection is by no means easily made. The color reaction is also remarkably similar. The last-named organism, however, can be successfully “cultivated,” while all of Dr. Arning’s attempts to obtain a “pure culture” of *Bacillus lepræ* met with failure, although in his experiments he employed every known culture medium, and tried some not hitherto used, such as the favorite native dish “pol.” Not even on excised tubercle would the bacilli flourish. Finally, almost by accident, he obtained a *comparatively* pure growth of the desired organism. A small piece of excised tubercle from the chin of a léper had been placed in a small glass vessel for maceration. After an absence of nearly eight months Dr. Arning examined the preparation (which had in the meantime been kept supplied with water by his laboratory assistant) and found a gray scum on the surface of the water. The bottom of the glass vessel was covered with a detritus, consisting of micrococci, putrefactive bacteria and other fungi. The scum was found to consist almost entirely of aggregated masses (Zooglœa) of a bacillus which Dr. Arning feels justified in stating was undoubtedly *Bacillus lepræ*, although the rods were slightly shorter than usual. Upon attempting to continue the culture of a portion of this scum in water, an attenuated growth, still comparatively pure, was obtained. At this interesting juncture Dr. Arning’s experiments were interrupted by reason of his departure for Europe, but he hopes to be able to resume them before long.

It has been a disputed point as to whether or not the bacilli of leprosy grow inside of cells. That they do so has been denied by Unna, but some beautiful double-stained preparations made by Dr. Arning seem to demonstrate beyond all possible doubt that such is at least a frequent, even if not the invariable, method of growth. Dr. Arning further stated that in the anæsthetic red patches peculiar to this disease, no bacilli had been found. Neither did they appear in the sores due to the killing of the nerves leading to those points, while in the tuberculous patches large numbers of free bacilli were always found. From these and other indications he inclines to the opinion that the disease is propa-



gated by the accumulation of bacilli in the large nerve trunks. In the blood of leprous patients these organisms are not found.

In the internal organs of the victims of this disease, great changes are found. Lepers are often booked as having died of consumption. In many such cases Dr. Arning is convinced that the breaking down of the lung structure is due to the ravages, *not* of *Bacillus tuberculosis*, but of *Bacillus lepræ*. In tuberculous consumption, the bacilli are originally found in the "giant cells," but in leprosy there are no such cells. Another point of difference is that there is seldom or never any hemorrhage of the lungs in leprous patients. After alluding to the presence and describing the appearance of the bacilli in the spleen, kidneys and other organs of lepers, Dr. Arning stated that in the present state of knowledge on the subject, it is impossible to explain how the virus enters the system. Many inoculation experiments have been made, but, while it would perhaps be premature to describe them as failures, yet they have hitherto proven almost resultless. The progress of the disease is extremely slow. In fact, there is a peculiar latency about it which is exceedingly baffling to investigation. Although leprosy is probably the most ancient disease known (it having been recognized at least as early as 1500 B. C.), yet there are few disorders about which less is known.

The difficulty of pronouncing an accurate prognosis in the early stages of disease was alluded to. Intimately connected with this was the question of segregation, with its accompanying horrors. Should all cases showing the least primary lesion of tissue—which might or might not develop into the dread disease—be ruthlessly torn away from the closest ties of family or friendships to a terrible isolation with doomed and dying wretches? In view of all the known facts, the speaker was of the strong opinion that this course would never be justified. In conclusion Dr. Arning said that years of patient and accurate researches would be required for the solution of the many difficult problems presented by this subject, and in view of its great importance to the world in general, and to the people of the coasts in particular, he commended it to the especial attention of the members of the medical fraternity.

He then exhibited a large number of objects illustrative of the subject, under several fine instruments. Various staining processes had been employed in the preparation of

the specimens, and the bacilli in every case were sharply and beautifully differentiated from the surrounding tissue.

The discussion was listened to with the greatest interest, and at its close a cordial vote of thanks was unanimously tendered to the lecturer.

---

## Gleanings.

---

DOES THE SULPHATE OF QUINIA, WHEN GIVEN IN MODERATE DOSES, INCREASE THE NUMBER OF THE RED BLOOD-CORPUSCLES?—The very general use of quinine as a tonic, apart from any anti-periodic effect, shows that it must in some way improve the condition of the system, not only by acting as a simple bitter tonic, but also by means of some power peculiar to itself. The question with which this article is headed has been probably answered mentally in the affirmative by every one who has read it; but while this opinion is now prevalent among the profession, there has been no experimental proof of the correctness of this belief. On the contrary, all the experimentation of which we have any record is contradictory to the general idea. As long ago as 1855, Briquet made the assertion that quinine in continued therapeutic doses lowered the proportion of the red blood-corpuscles.

At the time that Briquet published his paper, the methods for making careful estimates of the corpuscles were very crude, comparatively speaking, and even at the present day, all of the hæmatocytometers are in part unsatisfactory, and, to a certain extent, unreliable. That they are accurate enough to be useful adjuvants to the armamentarium of the clinician is certain, but he who does much blood-cell counting must be impressed with the thought that the old methods must have given very uncertain results.

While our apparatus is, therefore, somewhat inaccurate, it makes little difference in the results obtained in an investigation such as the one before us, since the object is not to find out the exact number of the corpuscles, but to discover if their number, under the same circumstances, is increased or diminished, the same blood-cell counting apparatus being used in each and every count.

The writer used the apparatus of Malassez, with the mixer of potain. In taking the doses the following order

was adhered to: Four grains at bedtime, and three grains each after breakfast and after dinner, at midday.

The tables show a very considerable increase in the red blood-corpuscles when the system is under the influence of quinine. It is proper to state that, owing to idiosyncrasy, ten grains of this drug a day produced positive symptoms of cinchonism.

Twenty-eight counts were made in fourteen days: fourteen without and fourteen with the use of the drug.

Average number before drug, 5,822,286; average number with drug, 6,194,285.

THE ASSIMILATION OF IRON.—*Medical News*, April 17, 1886 (Editorial):—Much difference of opinion has existed as to the method of action of ferruginous tonics. That their use is of advantage is a matter of daily observation, but many difficulties arise when we attempt to explain their mode of assimilation, for, apart from the fact that nearly if not quite all the iron so ingested is recoverable in the feces, we are met with the equally perplexing fact that iron salts when introduced into the blood stream cause toxic symptoms analogous to those induced by arsenic.

It has long been recognized that the iron entering into our structure is not normally derived from any inorganic salt, but from one or more complex iron-containing compounds existing in our food, and to be found typically, of course, in milk. Bunge, in the *Zeitschrift für physiologische Chemie* for 1885, records the extraction, from milk and from egg yolk, of this iron-containing organic compound, to which he gives the name of hæmatogen.

Bunge has extracted hæmatogen from the cereals and leguminosæ, and states very distinctly that our food "contains no inorganic iron combination, the iron present being in the form of complex organic compounds, which are built up by the vital activity of the plant; that in these forms the iron is absorbed and assimilated; and that from them the hæmoglobin originates."

Starting from these premises, Bunge's explanation of the value of inorganic iron salts in chlorosis is very interesting. The catarrhal state of the alimentary tract present in this condition favors a process of fermentation which induces the decomposition of hæmatogen. But when the inorganic iron salts are present, the sulphites evolved in decomposition attack such salts, with the result of sparing the hæma-

togen. Confirmatory to this theory is the recent method of treatment of chlorosis, in which the disinfection of the digestive tract by the administration of small antiseptic doses of hydrochloric acid, after meals, has been found more efficient than the use of iron.

ATROPINE IN POISONING BY MORPHINE.—In the *Vratch*, No. 44, 1885, p. 733, Dr. J. L. Javorsky, of Tashkent, records the case of a strongly built and generally healthy midwife, aged 33, who attempted to destroy herself by taking at 1 A.M. about 30 grains of acetate of morphine and half an ounce of tincture of opium, *Pharm. Rossicæ* (1:10). No nausea or vomiting occurred. She fell asleep and awoke about 8 A.M., looking very ill. When first seen by the author (at 9 A.M.), she lay speechless in a comatose state, with irregular, slow, superficial breathing, extreme myosis, her jaws being firmly pressed together. A hypodermic injection of a fourth of a grain of apomorphine produced vomiting in fifteen minutes, after which the author succeeded in introducing into the patient's stomach about six ounces of strong coffee, with a large quantity of tannin. The patient's state, however, steadily grew worse. At 11 A.M. the author began to inject one-sixth of a grain of sulphate of atropine every fifteen or thirty minutes. Exactly one grain of the alkaloid was used up to 3 P.M., causing only a moderate mydriasis, but no improvement in the state of the patient, who lay now pulseless, breathing only five times a minute. In spite of the apparent hopelessness of the case, the author went on injecting atropine, alternating it now with injections of tincture of musk. And his energetic efforts were fully rewarded; about 9 P.M. the pulse became full, 90 a minute, and the breathing regular, 12 a minute. At 11 P.M. the patient became conscious and asked for drink. Having passed a quiet night, she rose on the next morning free from any danger. The whole amount of atropine injected from 11 A.M. till 9 P.M. was 2.03 grains; that of tincture of musk, about 2 drachms. Dr. Javorsky thinks that his case strongly supports the theory of an antagonism between atropine and morphine (as upheld by Binz, Benzold, Henbach, etc., against Onsum, Camus, Bois, Knapstein, Dokhman, etc.). [Dr. R. Neale's *Medical Digest*, sect. 376:5, contains a series of cases of morphine-poisoning cured by atropine. In the *Voënnö Meditz. Jürnal*, August, 1877, Dr. Dobrokhotoff



describes recovery after poisoning by 10 grains of morphine dissolved in 5 ounces of bitter almond-water; the patient, a weak woman, aged 24, was treated by atropine, administered both hypodermically and internally (altogether 2-5 grains), tincture of belladonna 30 drop doses, powder of musk in 1-gramme doses, etc. In the *Vratch Vedomosti*, No. 27, 1883, p. 4162, Dr. Rodzewicz publishes a recovery after 8 grains of hydrochlorate of morphine, the treatment consisting in enemata of coffee-infusion, friction, electricity, wine, etc.—*Rep.*—*London Medical Record*.

THE TREATMENT OF GONORRHOEA BY IODOFORM.—Dr. Alexander V. Khrul, of Irkutsk, recommends (Proceedings of the Eastern Siberian [Irkutsk] Medical Society, 1885, p. 34) the treatment of gonorrhœa after the method of Dr. Watson Cheyne (described in the *British Medical Journal*, 1881), somewhat modified, which he has successfully practiced about two years. An ointment made of one part of iodoform and ten parts of vaseline is somewhat liquefied by heating, and then aspirated (by suction) into a fine elastic catheter, the latter being anointed externally with the same mixture and introduced into the urethra to the depth desired. The ointment is blown out of the catheter by the operator's or patient's mouth applied to the free end of the instrument. The advantages claimed for this plan by the author, on the ground of seventeen cases, are as follows:

1. It enables even deeper parts of the urethra to be subjected to the direct action of the iodoform.

2. While covering the urethra walls, the ointment gives them sufficient protection against any irritating influence of the urine.

3. The method enables us to get rid of internal administration of balsamic drugs, which are injurious, being apt to produce renal pain, albuminuria and nephritis.

4. On the other hand, it enables one also to get rid of the treatment by watery injections, which do not allow any prolonged contact of the medicaments with the diseased mucous membrane.

5. The ointment produces a strikingly rapid narcotic and disinfectant action, the painful phenomena of the acute stage disappearing within twenty-four hours.

The method is especially indicated in persons with irritable urethra and kidneys. The single drawback is the necessity of aspirating and insufflating the ointment by the

mouth, which procedure may appear rather unattractive, even to not overfastidious people. However, it might be replaced by the use of an India-rubber contrivance.—*London Medical Record*.

SEPTIC AORTITIS.—At the meeting of the Pathological Society of London, on April 6, 1886, Dr. F. Charlewood Turner showed three specimens of septic aortitis and a microscopic section from a fourth case. The first specimen showed the aorta extensively ulcerated, with undermining of the endarterium. This was obtained from a female, aged 62, who had aortic incompetence, with hypertrophy and dilatation of the left ventricle, and granular kidney. Microscopic section from one of the ulcers showed masses of micrococci in the deepest layer of the endarterium, at the base of the ulcer. The second specimen showed massive fibrinous coagula in the arch of the aorta; this was from a case of burn, fatal on the twenty-fifth day, from suppuration and pyrexia. The third specimen was from a man who died of secondary hemorrhage, from a wound of the left internal mammary artery. A fibrinous mass was found adherent to the aorta near the valves, with smaller fibrinous deposit on atheromatous elevations. A fourth case was mentioned, in which a similar lesion was found in a patient who died on the second day after primary amputation of the thigh. A microscopic section showed masses of leucocytes about the vasa vasa in the outer and middle coats, great swelling of the intima with corpuscular infiltration and exudation in the most superficial layer, and cloudy granular fibrin on the surface. The arterial lesion in all the cases was referred to the combined effect of structural disease and septic contamination of the blood, weakening the resistance of the tissues, and giving a grave character to the lesion. The difference in anatomical character between the lesion in the first case and in the other was attributed to the predominance of the former factor in the one case, and of the latter factor in the other. The vascular lesion in this specimen was regarded as indicating the starting of similar lesions of the pulmonary artery or venous trunks, and of thrombotic lesions of smaller vessels, associated with severe endocarditis.—*British Medical Journal*.

ON THE ACTIVE INGREDIENTS OF ERGOT.—In *The Practitioner*, of December, 1885, Professor Rudolph Kobert records a series of experiments with the active principles of

ergot. Experiments with ergotinic acid, internally and hypodermically, on pregnant bitches, rabbits, cats and sheep show that it possessed no ecbolic power. Hence all aqueous extracts (as water dissolves only the ergotinic acid) are worthless. The *extractum secalis cornuti* of the German Pharmacopœia is an aqueous extract, and consequently is inert. Cornutine is not to be confounded with the ergotinine of Tanret, as the latter is inert, producing uterine contractions both in animals that are pregnant and in those not. Sphacelinic acid is insoluble in water, and must be given in an emulsion. In cats and dogs it provoked powerful labor-pains, followed rapidly by the birth of the fœtus. From this it is seen that in the ecbolic action caused by ergot both cornutine and sphacelinic acid take part. The latter acts directly on the uterus, while the former influences directly the center for the uterine contractions, situated in the spinal cord. Professor Kobert had requested Gehe & Co., of Dresden, to prepare an extract that contained both these active principles, which is called "extractum secalis cornuti cornutino-sphacelicum Kobert." It does not keep well for longer than six months, but Professor Kobert emphasizes the statement that neither ergot itself, nor any of the numerous commercial European and American preparations that he has examined, retains their therapeutic powers for more than twelve months.—*New York Medical Journal*.

**BENZOATE OF COCAINE.**—Senor Alfredo Bignon, in a paper read before the Lima Academy of Medicine, and published in *La Cronica Médica*, strongly recommends the employment of the benzoate of cocaine in preference to the hydrochlorate (the salt most commonly used), and to the salicylate and borate, with which he has also made experiments. He finds that the benzoate is extremely soluble, easily crystallizable, and retains the characteristic odor of coca itself. The antiseptic qualities of benzoic acid also are an additional advantage. Amongst other experiments, the anæsthetic effects of a 20 per cent. solution of the benzoate were compared with those of a similar solution of the hydrochlorate in a case of epithelioma of the tongue, with the result that the effect of the former salt persisted for a much longer time than that of the latter.—*Lancet*.

## Book Notices

---

A SYSTEM OF PRACTICAL MEDICINE. By American Authors. Edited by William Pepper, M. D., LL. D., Provost and Professor of the Theory and Practice of Medicine and of Clinical Medicine in the University of Pennsylvania. Assisted by Louis Starr, M. D., Clinical Professor of Diseases of Children in the Hospital of the University of Pennsylvania. Vol. V. Diseases of the Nervous System. 8vo. Pp. 1,326. Whole number of pages in the work of Five Imperial Volumes, about 6,000. Price, per Vol., in Cloth, \$5; Leather, \$6; Half Russia, \$7.

We have noticed each volume of this great work of American medicine as it has appeared. The one before us is the *fifth* and concluding one. The editor, in presenting it, thus expresses himself in a VALEDICTORY to the subscribers: "The original prospectus of the work was issued in 1881. The first volume was published in January, 1885; the second, in May, 1885; the third, in September, 1885, and the fourth, in February, 1886. In view of the delays, inevitable in large and complicated literary enterprises, such unusual punctuality reflects credit alike on the zeal of the contributors and the energy and resources of the publishers. The plan of the work has been strictly adhered to, and the articles promised have been furnished without exception, although in a very few cases circumstances required a change in the authorship. \* \* \*

"The number of articles is one hundred and eighty-five, written by ninety-nine authors, covering, with indexes, five thousand six hundred and forty-one pages, and throughout its whole extent the original purpose has been kept constantly in view, that the practical character of the work should adapt it specially to the needs of the general practitioners. In conclusion the editor feels that it is a subject of congratulation that through the combination of so many leading members of the profession it has been rendered possible to present in this work, for the first time, the entire subject of practical medicine treated in a manner truly representative of the American School."

As shown by the title-page, the work has been written exclusively by American writers, who are familiar with the diseases of this country and the best methods of treating



them. Of course, the pathology of any particular disease is the same in this country, as a rule, that it is in Europe; but climate, soil, modes of living, etc., exert influences which tend greatly to modify the treatment.

The work having many authors instead of only one, as is the case generally with works upon the practice of medicine, it possesses the important advantage of having had the various articles contributed by those who have given them especial attention. It must be admitted, of course, that those who have made a special study of certain classes of diseases are generally the most qualified to write about them. Among the contributors to the fifth volume we find the names of the following distinguished gentlemen: Drs. John J. Ashhurst, Chas. F. Folsom, Allen McL. Hamilton, Mary Putnam Jacobi, H. D. Schmidt, Edward C. Seguin, E. C. Spitzka, Horatio C. Wood, etc. There are twenty-three contributors in all to the fifth or concluding volume.

The fifth volume, which concludes the work, is devoted to the diseases of the nervous system. The first article is upon the General Semeiology of Diseases of the Nervous System, by E. C. Seguin, M. D. Under the first head is treated Psychic Symptoms. Under the second, Sensory Symptoms. Under the third, Motory Symptoms. Under the fourth, Trophic Symptoms. Dr. Charles F. Folsom occupies over a hundred pages in treating mental diseases. We find other writers discussing hysteria, alcoholism, epilepsy, catalepsy, ecstasy, neurasthenia, paralysis, sclerosis, apoplexy, meningitis, etc.

We have understood that the work has met with great success. It is surely most worthy of it. A physician can have no more valuable work upon the shelves of his library. Young physicians just beginning the practice of medicine should procure the volumes and attentively study them. The valuable information they would procure would aid them greatly in obtaining business.

---

A MANUAL OF DIETETICS. By J. Milner Fothergill, M. D., Edin., Physician to the City of London Hospital for Diseases of the Chest (Victoria Park). Hon. M. D. Rush Medical College, Chicago, Ill., Foreign Associate Fellow of the College of Physicians, Philadelphia. 8vo, extra muslin. Pp. 255. Price, \$2.50. New York: William Wood & Co.; Cincinnati: Garfield.

This is a new and original work upon the subject of diet-

etics. "Modern advances in our knowledge of the physiology of digestion," as stated in the preface, have been accompanied by a like progress in the preparation of foods. The value of predigested carbo-hydrates in acute disease and malassimilation among adults, as well as children, is now being gradually realized. The digested albuminoids are making their way; while oil emulsions have established themselves on a firm footing. The many evils of a dietary too rich in albuminoids are now being generally recognized. The time indeed is at hand when systematic lectures on food will be a part of the curriculum in medical teaching; while the value of feeding in disease is admitted to be as important as the administration of medicines.

This work is probably the best work upon dietetics in the English language, and should be read by every physician. It is no doubt true that many diseases are better treated by attention to the quantity and quality of the food taken, than by the administration of medicines. But no physician is competent to thus treat a patient, unless he is thoroughly conversant with all the different kinds of food, their digestibility, the kind of nutrition they respectively afford, their preparation, etc.

We recommend the work to the attention of the readers of the MEDICAL NEWS, assuring them that its attentive study will afford them much valuable information.

---

## Editorial.

---

THE TRANSACTIONS OF THE ILLINOIS STATE MEDICAL SOCIETY.—We are indebted to Dr. F. L. Matthews, Springfield, Illinois, at present Surgeon-General of the State, for a copy of the proceedings of the meeting of the Illinois State Medical Society, held at the capital of the State, May 19, 20, 21, 1885. The work forms a handsome volume of 364 octavo pages bound in cloth.

The President, Dr. David S. Booth, in his annual address made some very good remarks. In speaking of physicians, ministers and lawyers, he says: "The treatment of the soul and body in our day are separate, the first relegated to the minister of the gospel, the latter to the physician, while the lawyer looks after the property. The three might work in harmony if the people would permit, but this they will not

do, as they will pay more to save their property than they will to save *soul* or body, or even both."

Of course, when a man's life is directly threatened, he will give all that he possesses to save it; but if his life is only indirectly endangered, he will oftentimes take terrible risks before sacrificing a few dollars. Men of wealth, not unfrequently, in cases of themselves and of members of their families, will often delay sending for a physician when sick, until grim death is staring them in their face, in order to save expense. It is a very common circumstance for such to quarrel with a skillful medical man who has saved them from the grave, because, forsooth, he has charged a living rate for his services, and afterward employ a doctor poorly qualified, "because he does not charge so much." But the same rich man will willingly pay a lawyer a fee of \$25 for counsel not occupying more than half an hour in giving, in a matter in which perhaps not more than a hundred dollars is involved.

Dr. Booth's advice to young physicians is certainly very good. He says: "Study without ceasing, from authorities, at the bedside, in the dead-house, and from every avenue of learning, filling up the interim in meditation. Avoid everything demoralizing—mentally, morally, or physically, or that will in any way debase you, or interfere with your studies, such as saloons, gaming houses, as well as those who frequent such places. Select the purest and the best informed for companions, and let no opportunity pass where your stock of information can be increased. Remember that you are the custodian of the health and, in a measure, of the lives of your fellow-beings, and that God will hold you to a strict accountability for your stewardship.

"Medicine can not be learned in the company of the vulgar and uneducated, and nothing ennobling can be learned in a bar-room or gambling hell—the only graduates that such places ever turn out are drunkards and idlers. Add something every hour to your stock of useful knowledge, as the hour that is lost can never be recalled."

Better advice than this that is contained in the remarks of Dr. Booth was never given to young physicians. Bar-rooms and gambling places, where the idle and vicious resort, are not places where a young physician should be found spending his leisure time, even though he may not be in the habit of indulging in drunkenness or gaming. There is nothing that transpires at such resorts that tends to refine,

elevate and improve the mind and morals. Everything connected with them has the contrary effect. Coarse and low language is heard, and what is good and pure and elevating is derided. It is taught that integrity of character has no existence and that virtue belongs to the past, when people were simple-minded. While a young physician is "waiting for practice," it is better for him to school himself to get along without any society, however irksome it may be, than to seek companionship among the frivolous and viciously inclined.

The orator quotes the oft-quoted lines of the poet:

"A little learning is a dangerous thing;  
Drink deep, or taste not the Pierian spring;  
There shallow draughts intoxicate the brain,  
And drinking largely sobers us again."

The object of the speaker, of course, is to impress upon his hearers that, so vast is knowledge, we can, even at the most, obtain possession of only a very small portion of it; and that if we stop short of acquiring all that we possibly can, our limits of doing good must necessarily be exceedingly circumscribed. A certain writer says: "The more deep and thorough our knowledge on any subject, the more humble is our estimate of that knowledge. We then see heights to which we have not attained and depths that we have not fathomed. Compared with these, our actual knowledge seems small and shallow." "When we merely skim the surface of a subject, we have no such measure to gauge ourselves by, and our small attainments loom up to our view in most exaggerated dimensions."

Other things being equal, judgment is of value only in proportion to the knowledge of the subject to be judged. A person may have a large amount of knowledge and have but little judgment. A physician of our acquaintance, now dead, possessed a wonderful amount of knowledge, *i. e.*, he had stored up in his mind or memory a vast quantity of facts relating to history, the natural sciences, theology, law, medicine, etc., yet he was evidently defective in judgment. Yet the statement must be accepted as correct, that, with two persons whose reasoning faculties are equal, the judgment of one will be of more value than that of the other upon any subject, in proportion as his knowledge of it is greater.

In conclusion we will quote a portion of a paragraph of what Dr. Booth says about specialists: "It can not be



denied that the early and exclusive study of the affections of a part, and that often a very small part, of the body, has a tendency to narrow the intellectual grasp, and to cramp the powers of the man who yields to the influences incident to such partial and one-sided training."

---

A RELIGIOUS PAPER ON PHYSICIANS' FEES.—We clip the following from the *Herald and Presbyterian*, of Cincinnati: "The cost of a doctor's visit in China is from five to ten cents. If their medicines are harmless, it might be well not to oppose the immigration of some of them to this country, particularly in our large cities, where a man has often to pay a bill of several hundred dollars for a dozen visits."

We will be obliged to the *Herald and Presbyterian* if it will point out, not a score of the instances in which "a man has often to pay a bill of several hundred dollars for a dozen visits," but a single one. Physicians who have practiced medicine in Cincinnati for thirty years have never known any in their city nor have ever heard of any in other cities. If they succeed in getting two dollars a visit, they are too well satisfied to entertain for a moment a charge of several hundred dollars for a dozen visits. But a physician oftener gets less than two dollars a visit than he gets two dollars. But hundreds of visits he makes every year for which he receives nothing at all. Many to whom he has sent bills swindle him out of his just dues after having received his very best services, calling him from his bed at night, besides sending for him during the day, but there are scores whom he attends upon as sedulously and with as much interest, against whom he never makes a charge.

Certainly no minister has ever been charged several hundred dollars by a physician for a dozen visits. In fact, there is no class of men to whom ministers are so greatly indebted as to physicians. When at former periods tradesmen charged them the same for their commodities as they charged other people, and regarded it as right to do so, although the remuneration of ministers was very small and had to be supplemented by donation visits, etc., physicians cheerfully attended upon them and their families, in country places furnishing medicines, without charge or receiving recompense of any kind, and yet a physician's services were his living as much so as the tradesman's commodities were his living. Even now, when ministers are comparatively very

well paid—those who are in charge of congregations receiving larger incomes than physicians on an average get from their practices—they pay but very little for medical services. When a physician makes a charge to one in consequence of his services being called very greatly into requisition, he reduces it to from one-half to a quarter the amount he charges others.

We feel sure, that, in times past, ministers would have been driven from their work in the villages and country places, where they are now receiving comfortable salaries, if physicians had not generously given them and their families their services. Preachers as well as others require medical services and medicines, especially in new countries, where, in consequence of the large amount of miasm that exists, fevers greatly prevail, but their small incomes would not have permitted them to pay for it. Therefore, if called upon to pay the doctor, we are of the opinion they would have been compelled to abandon their preaching. Their flocks, we are sure, would never have consented to be taxed to pay medical bills, though occasionally they would supplement their pastor's salary by sending a bushel or so of potatoes or apples.

Come, point out an instance or so in which a physician has received several hundred dollars for a dozen visits.

---

VALENTINE'S MEAT JUICE.—Dr. Frank L. James, in the July issue of the *St. Louis Medical and Surgical Journal*, speaks of this preparation in the highest praise in cases of emaciation and extreme prostration following upon typhoid fever and other low forms of disease when beef extracts, beef teas, beef and chicken broths, peptones, etc. are not tolerated and have become very distasteful. He relates the case of a lady, twenty-five years of age, who, while convalescing from an attack of typhoid fever, was attacked suddenly by a violent form of dysentery. Epistaxis, also, which had occurred occasionally during the earliest stages of her disease, reappeared, and her condition became very alarming. Her strength, already much impaired, rapidly failed, and in the course of a few hours she was reduced to a pitiable condition.

The dysentery, he states, was met with opium and iodoformed charcoal, and the epistaxis by ergotine hypodermically injected; but the real problem—that of maintaining the patient's strength—was a more difficult matter. Stimu

lants like egg-nogg, cream-punch, etc., had become distasteful, and were used only by such persuasion as amounted almost to compulsion. During the course of the disease the various forms of concentrated food were employed, and had been continued until she had become tired and disgusted with them, and could no longer tolerate them.

Under the circumstances, Dr. James, while casting about in his mind to think of some form of concentrated animal food he might employ, bethought himself of Valentine's Meat Juice. Without the patient being informed of the nature of the food, it was given to her in doses of 30 minims every one-and-a-half or two hours, diluted sometimes with milk and sometimes with water. The juice was well borne—the patient declaring that it tasted good. During the first two days it was administered tepid, but afterward it was mixed with cold water, the patient relishing the change. At this time the dose was increased to one teaspoonful every three hours.

The result was in every way satisfactory. So soon as the dysentery was checked (the third day), convalescence recommenced and proceeded, though slowly, to complete recovery. For six days the patient received no other nourishment than that afforded by the meat juice and the small amount of milk given with it. Every other form of meat extract produced loathing to an extent as preclude its use.

Dr. James also reports a case in which epithelioma of the tongue preventing the use of solid foods, the strength of the patient was maintained, for many weeks, almost wholly by the use of Valentine's Meat Juice. In conclusion the Doctor states that he considers the preparation in all forms of wasting disease as invaluable. The only drawback attending its use is its great cost, and if manufacturers could only cheapen its mode of production, he thinks a great service would be rendered the sick and suffering and their friends.

The very favorable report of Dr. James of the effects of Valentine's Meat Juice reminds us of the astonishing benefit we have derived in low forms of disease, when the strength of the patient had been reduced to almost nil, and the digestive powers were nearly extinct, from Murdock's Liquid Food. We have known this preparation to be tolerated when every other form of nutrition was rejected—either causing loathing to a degree as to make it inadmissible, or producing such pain as to forbid its use. Several months ago, we believe, we reported the case of a poor woman in

the last stages of consumption whose life was undoubtedly considerably prolonged by it; and we have sometimes thought that she might have recovered if its use had been commenced earlier in her case. Be that as it may, however, when we first saw her she seemed unable to tolerate food of any kind. The only nourishment that she had been receiving for some time was, now and then, a little milk, which was retained, although producing more or less distress. The Murdock Food agreed with her from the first. For some days she improved in strength, the terrible feelings of oppression, from which she had been suffering, becoming almost relieved. Her night-sweats became less profuse, and even her cough for a time seemed to improve. But disease had made too great havoc with her lungs to permit of more improvement than would temporarily occur from finding a food that, by its absorption by the blood-vessels, would afford more nutrition than she had been receiving and at the same time not accompanied by any suffering.

*Note.*—Dr. James adds a note to his article, in which he describes how iodoformed charcoal, introduced by Bouchard to prevent putrefaction in the digestive tube during typhoid and kindred diseases, is prepared, which is as follows: Dissolve 10 grains of iodoform in  $3\frac{1}{2}$  ounces of sulphuric ether and stir into the solution  $2\frac{1}{4}$  ounces of pulverized charcoal." The mixture is made as thorough as possible, and the ether is then allowed to evaporate, leaving the charcoal completely iodoformized, the iodoform being in a state of the minutest subdivision. Finally the charcoal is mixed with  $5\frac{1}{2}$  fluid ounces of glycerine and the mixture administered in doses of a half ounce in a wine-glass of water every two hours.

---

NEW AFFECTIONS OF THE SKIN.—We had thought we were acquainted with the nomenclature of the diseases of the skin, but we will have to confess that such has not been the fact. Although we have been familiar with a legion of names expressing cutaneous affections, yet it seems, from what we have recently learned, we still did not know them all. Dr. James Nevins Hyde, of Chicago, has disabused us of the ignorance under which we were lying, having just issued a work from the press devoted to such skin diseases as "Prairie Itch," "Ohio Scratches," "Michigan Itch," "Texas Mange," "Camp Itch," "Prairie Digs," "Lum-



berman's Itch," "Swamp Itch," "Cutaneous Pruritus," "Pruritus Hiemalis," "Winter Prurigo," "Winter Eczema."

Notwithstanding all of these many "Itches," yet he still recognizes, it seems, a disease of the skin, apart from all of them, that he calls "The Itch." We presume it must be the "Itch," *par excellence*, the "Itch" of Itches. For this chief of "Itches," as we presume it is, he applies the Latin name of *Scabies*, the name which we had always been under the impression was the name for the only "Itch" that there is. Whether this *Scabies* with Dr. Hyde constitutes the Itch which we have always regarded to be the Itch, we do not know.

Such a legion of Itches as Dr. Hyde seems to have discovered is calculated to fill one with fear. So long as there existed only one Itch to contend with, one could reasonably hope to be able to escape an attack from it by taking proper precautions. But what chances of escape can there be when there is found to be a legion of Itches to contend with. And delicate young ladies, with small white hands, how are they to avoid becoming victims, with such a fearful number of Itches let loose in the land, and escape having their beautiful, tapering fingers all marred and scarred?

The Ohio Scratches! We feel like emigrating from the State. But where shall we go? We can not escape to Michigan; for if we should a hospitable hand would be extended covered with the Michigan Itch. We can not find safety in Texas, in consequence of the "Texas Mange." In other places we would probably find lying in wait for us the "Lumbermen's Itch," or the "Swamp Itch," or the "Prairie Digs," or the "Camp Itch." But if we should fortunately escape all of these, we would be sure to become a victim of Dr. Hyde's "Itch" or *Scabies*.

Dr. Hyde, it appears, blames all of these Itches on the unsteadiness of the thermometer. Can not the Signal Corps do something to stop this play of the mercurial thing? Says Dr. H.: "Its [the thermometer's] rapid play from one point to another begets the mischief." Our plan would be to smash it, and thus put an end to the army of Itches.

---

HONORS TO DR. O. W. HOLMES.—Our readers are aware that the distinguished poet and physician, Dr. Oliver Wendell Holmes, is now visiting England, where he has been received with distinguished honors by the literati of that

country. In addition to many dinners and suppers given him, and probably many invitations extended him to breakfast by eminent individuals, we learn that Cambridge is about to confer upon him the honorary degree of Doctor of Letters. It is also stated that he will shortly pay a visit to Oxford, another seat of learning, as the guest of Professor Max Müller.

By the way, a gentleman who is a graduate of one of the colleges of Oxford, England, was recently assisted by one of the districts of the Associated Charities of Cincinnati.

---

THE USE OF ALCOHOL.—Dr. J. Milner Fothergill, in his work upon Dietetics, has an interesting article upon the use of alcohol. In discussing it he quotes a couple of verses from Burns as follows:

“John Barleycorn was a hero bold,  
Of noble enterprise,  
For if you do but taste his blood,  
'Twill make your courage rise.

“'Twill make a man forget his woe,  
'Twill heighten all his joy;  
'Twill make the widow's heart sing,  
Though the tear were in her eye.”

It is this effect, he says, which constitutes the danger of alcohol; and if the delight in such excitement can not be kept within strict bounds, the downward career of alcoholic excess ending in drunkenness and degradation, is apt to be set on foot.

King Chambers writes: “All nations that have led the van in the march of civilization have been addicted to drink—aye, and addicted to drunkenness. The Jews, the Greeks, the Romans, the Germans, the Swedes, the Danes—not to mention the English all round the globe, are amply attested by their own native literature to have been distinguished above their contemporaries in this way. It is true that some reactionary races, famous as conquerors, have been abstinent, but they and their faiths are dying out, and the coloring they have given to civilization is even now fainter than that left by the robust races a thousand years before they were heard of.” Mr. Maudsley has pointed out that drunkards in society are like the waste-heaps of manufacturing industries—so many witnesses of the intellectual activity going on around them. But who would wish to become a drunkard, and form a part of the débris resulting from intel-

lectual activity going on around, or be a heap of filth in evidence that intellectual activity exists?

Dr. Fothergill denounces the use of alcohol under all circumstances in the case of children. He says it is an injury to a child to subject its tissues to the action of alcohol. Children are like inferior races, of which Sir Wm. Roberts writes: "There are certain inferior races which appear to be altogether intolerant of alcohol. Either it does not suit their type of nutrition, or they lack the self-control which is necessary to its beneficial use."

He advises not to administer stimulants to those having a hereditary tendency to hysteria or other functional disease of the nervous system, even though the parties have no other disqualification to its use.

---

PROF. ROBERTS BARTHOLOW.—We learn from a communication we have recently received from Dr. Bartholow, that he is spending the heated term at the seaside, at Wareham, Mass. He will remain there until about September 1st, when he will return to Philadelphia to resume his labors in Jefferson Medical College.

---

DEATH OF DR. FRANK HAMILTON.—Our readers will be pained to learn of the decease of the very eminent surgeon, Dr. Frank Hamilton, of New York, who died at his residence, in that city, No. 43 West Thirty-second Street, August 11.

He had suffered from pulmonary hemorrhages since 1883, but had been confined to his bed only two weeks. His disease is stated in the newspapers to have been fibroid phthisis.

Dr. Hamilton was born at Wilmington, Vermont, in 1813. He was graduated from the Pennsylvania University in 1833, and first settled in Auburn, N. Y. In 1844 he went to Buffalo and with Dr. Austin Flint, Sr., and Dr. J. P. White established the medical department of the Buffalo University. In 1860 he removed to Brooklyn, and after his services in the war, where he rose to be Medical Inspector of the army, he took up his residence in New York City. He was one of the founders of the Bellevue Hospital Medical College. Among the many honorary positions held by him the following may be mentioned: President of the Medical Society of the State of New York, 1855; President of the New York Pathological Society, 1866; President of the Medico-Legal Society, 1875. He was consulting surgeon

of nearly all the great hospitals of that city. As a writer on medical subjects he was an accepted authority. His "Treatise on Fractures and Dislocations" is regarded in all countries as the leading work on the subject. Dr. Hamilton's boldness and success in surgical operations were remarkable. He also invented many ingenious mechanical aids to surgery. Opinions advanced by him twenty-five years ago, in regard to the treatment of bone fractures, have but lately come into general recognition. Dr. Hamilton became widely known throughout the country in 1881 as one of the physicians in attendance upon President Garfield. He was noted for benevolence. He leaves two children, Theodore Hamilton and Mrs. Daniel Dows. His wife died a year ago.

---

DR. C. J. MONTGOMERY, of Lamar, Kansas, says: "I have used Celerina the last three years and have been highly pleased with its effects. 'In nervous affections consequent upon uterine derangement, I consider it the *sine qua non*.'" Dr. J. S. Macon, of Huntsville, Alabama, also says that Celerina acts like a charm in every case in which he has prescribed it.

---

LACTATED FOOD.—Dr. J. Milner Fothergill, the eminent dietetician, who is distinguished as an author and has quite recently written a work upon dietetics, thus expresses himself in regard to the "Lactated Food" of Wells, Richardson & Co., of Burlington, Vermont, whose advertisement is to be seen in the advertising form of the MEDICAL NEWS. Those gentlemen sent him a specimen, and an account of its constituents. In answer he wrote as follows:

"You state that it contains 'The purified gluten of wheat and oats with barley diastase and malt extract combined with specially prepared milk sugar'; in other words, that it is self-digestive as regards the conversion of insoluble starch into soluble dextrine and maltose. My experiments with it lead me to hold that this is correct.

"The food then contains carbo-hydrates, some albuminoid matter and the various salts in grain, notably phosphate of lime.

"Such a food can be added to milk and treated in the manner you describe in your leaflet. So prepared with milk, it forms an admirable food for infants and dyspeptic persons who require very digestible aliments.



"But it has a wider range of utility. The body-temperature is kept up by the combustion of grape sugar. Grape sugar is supplied from carbo-hydrates, either the insoluble starch or the soluble sugar. Starch forms a great portion of our food and is converted into grape sugar within the body. Where the system is unequal to the digestion of starch, as in feeble digestion, or conditions of acute disease, then predigested starch must be furnished to the organism. Otherwise the system will perish of exhaustion, just as a fire dies out when its fuel is consumed.

"Beef tea contains nothing which can form grape sugar, and in fact is a pleasant, stimulating beverage or food adjunct; but without food value practically. (For what food value it has is so infinitesimal that it is not worth counting.) But when it has added to it a food such as your Lactated Food, it has a distinct measurable food value. Consequently such food should be given with beef tea, and the compound forms a valuable food.

"When Lactated Food is placed in water hot enough to be sipped, a rapid transformation of the starch remaining in it (by the diastase it contains) goes on; and a nutritive fluid is the result which requires but a minimum of the digestive act.

"Such fluid can be flavored and drank as a nutritive beverage, specially acceptable in febrile conditions. Flavored with lemon, ginger, cloves or other flavoring agents to give variety—a matter far too much neglected in the treatment of the sick—it can be largely used. Or wine, either red wine as claret, or sherry or port, can be added to it when a little stimulant is required; and brandy when a stronger stimulant is indicated.

"The resort to farinaceous matters, predigested, must become greater and greater as our knowledge of digestion and its derangements waxes larger. It is not merely in the case of feeble infants that such predigested starch and milk sugar are indicated and useful; persons of feeble digestion require these soluble carbo-hydrates which they can assimilate.

"But to my mind an equally great matter is the feeding of persons acutely sick, and especially where there is pyrexia, who now are allowed to perish of inanition, on the mistaken conviction that beef tea is a sustaining food. It is in the sick room that soluble carbo-hydrates have a great future before them." J. MILNER FOTHERGILL, M. D.

# THE CINCINNATI MEDICAL NEWS.

VOL. XIX. No. 225.  
Old Series.

SEPTEMBER, 1886.

VOL. XV. No. 9.  
New Series.

## Original Contributions.

### A Case of Pyo-Pneumo-Thorax.

BY A. M'SHANE, M. D., NEW ORLEANS.

Read before the Louisiana State Medical Society.

THE patient was a well-built mulatto, about thirty-five years of age; he was a sailor, deck-hand, etc., aboard of one of our lake schooners, and his mode of living was, like that of all men of his occupation, rather irregular. One day, after working very hard for a long time, he jumped into the water to cool off. He had a chill almost immediately after coming out of the water, and he soon began to feel a severe pain in his right side. This took place about September 1, 1885. He never had a day of comfort afterward; he had fever constantly; the pain in his right side became almost intolerable, and he had a continuous dry cough. All of his symptoms, previous to his admission to the hospital, pointed to acute pleurisy of the right side.

At about 9 P. M., September 23d, he felt something give way in his right side; he felt a terrible pain; his breath became very short, and he almost fainted; he had all the windows and doors thrown open, but it seemed that he could not get enough air. He sat up all night, in great agony, gasping for breath. On the next day, September 24, 1885, he was brought into the hospital. Upon examination he was found to have hydro-pneumo-thorax.

Upon admission, the patient, though slightly emaciated, was in pretty fair condition. When I assumed charge of

the ward, early in November, the patient was feeling much better than when he entered the hospital. He was not suffering from any pain, but only complained of shortness of breath. He had an occasional but irregular rise of temperature. His respiration was hurried; the right side of the chest was dilated, and on this side vocal fremitus was absent; posteriorly there was dullness on percussion over the upper portion of the lung. When the patient was sitting upright, a tympanitic sound upon percussion was elicited all over the right side down to the level of the nipple, and below this there was complete flatness. Over the left lung, resonance was clear and well marked. The tympanitic sound on the right side extended to the left of the sternum anteriorly. Upon auscultation, exaggerated vesicular murmur was heard all over the left lung; the left lung had to perform the work of both lungs, thus giving rise to increased respiratory murmur. Over the right lung at the apex, posteriorly, bronchial breathing was heard; over the rest of the right lung, amphoric breathing and metallic tinkling. The amphoric breathing was heard up to about three weeks before the patient's death. Upon shaking the patient's chest, a clear succussion sound was obtained.

\* The heart was pushed over to the left. The point of apex impulse was two inches to the left of, and one inch below, the left nipple. A slight mitral systolic murmur was heard.

The patient suffered more from dyspnœa than from anything else. His appetite was at first very good, but by degrees grew worse, and, finally, it was only with an effort that he could take food of any sort. A severe pain developed in the left side; this was attributed to the pressure exercised by the displaced heart. No pleuritic friction sound was heard when the patient first complained of the pain.

Upon exploration with a hypodermic syringe, an odorless, opalescent liquid was obtained, which, under the microscope, was found to contain a large number of pus corpuscles. On December 14, 1885, he was aspirated with Dieulafoy's aspirator; eighteen ounces of this sero-pus were withdrawn. The patient did not want anything in the nature of an operation performed upon him, and it was with difficulty that he was persuaded to allow the aspiration to be performed. The fluid obtained by aspiration was opales-

cent, odorless, very rich in albumen, and containing, as before mentioned, a considerable number of pus corpuscles, the presence of which caused the opalescent appearance of the liquid.

The aspiration relieved his dyspnœa a little. Not all of the liquid had been withdrawn, as succussion was heard after the aspiration. All the while the patient had been kept up with tonics and stimulants; but he continued to grow weaker, the dyspnœa became more marked, and the pain in his left side became severer. Pleuritic friction sound was now heard on the left side.

After the aspiration the liquid rapidly reaccumulated; and on December 24, 1885, the right side was again aspirated. The second time, twenty-six ounces of liquid were withdrawn. The liquid was as before: opalescent, odorless and highly albuminous.

Meanwhile, the patient's cough altered in character; he began to spit much frothy mucus, frequently containing masses of muco-pus. Some of this sputum was sent to the pathological department, and examined microscopically; it was reported free from bacilli tuberculosis. It was again sent down for examination after an interval of a few weeks, and again reported free from bacilli tuberculosis. Examination of the urine revealed no abnormalities.

It is needless to describe in detail all of the patient's further symptoms; suffice it to say that his strength rapidly grew less, his appetite was entirely destroyed, he became very anæmic, the feet and ankles became œdematous; and he gradually sank, and died on January 3, 1886.

The autopsy was held four hours after death. For the notes on the autopsy I am indebted to Mr. Palmer, resident student.

The *rigor mortis* was but slightly marked. The body was emaciated. The right side of the chest was slightly dilated; on puncturing this side, a blowing sound was heard, indicating the escape of air from within the chest. The right pleural cavity was lined by a pyogenic membrane, and half filled with a greenish, purulent liquid, but which was, however, odorless. The right pleural cavity extended to the left of the sternum. The right lung was compressed against the middle of the body, extending from the upper to the lower part of the chest; it adhered to the upper surface of the diaphragm by one fibrous band, and to the apex of the chest by two or three such bands. It was compressed into



a carnified cylindrical mass about  $2\frac{1}{2}$  or 3 inches in diameter. No opening on the surface of the lung could be demonstrated by inflating the bronchi with a pair of bellows.

On the outer side of the upper lobe, about four inches from the apex, a small cicatrix was found. The cicatrix marked the site of the perforation. It led into a small phthysical cavity about as large as a thimble, lying just beneath the surface of the lung. The right lung was full of tubercles, but no other cavities were found.

On the left side there was general pleurisy; the left pleural cavity contained a large amount of sero-fibrinous exudation. At the apex, posteriorly, the left lung was bound down by old pleuritic adhesions. The left lung was extensively infiltrated with tubercles; cavities were found in the apex and middle of the lung; at the base there were a few tubercles.

The heart and the large vessels were pushed to the left; the aorta did not pass to the right of the sternum. No valvular lesions were found. The liver was pushed downward and to the left; it was slightly fatty; the spleen and kidneys were normal.

The autopsy was performed by Dr. S. E. Chaillé, Professor of Physiology and Pathological Anatomy. The subject was used to illustrate one of his lectures on pathological anatomy.

*Remarks:* There are many features in this interesting case worthy of extended discussion, but I shall select only a few.

The manner in which perforation of the pleura took place must, of course, first claim our attention. According to Bristow, the entrance of air into the pleural cavity may be "due to a wound such as is made in paracentesis, or when the pleura is punctured in the carelessly-performed operation of tracheotomy; or to the opening into the pleura of an abscess already communicating with the exterior, such as abscess in the parietes of the chest, a hydatid or other abscess of the liver, or one connected with carious vertebræ. Its most frequent causes, however, are the discharge of an empyema through the lungs or thoracic parietes, and the opening of a tubercular or other abscess into the pleural cavity. It is said to be caused sometimes by the rupture of emphysematous vesicles, sometimes by the decomposition of fluid and solid matters situated in the pleural cavity.

In our case, *post-mortem* examination has shown us the

cause of the perforation of the pleura ; ulceration and breaking down of a sub-pleural tubercle. That was the first supposition that was made during the life of the patient, and in order to confirm or correct it, the sputum was subjected to a microscopic examination, and no bacilli tuberculosis were found. These organisms, even in undoubted cases of tuberculosis, are not found in the sputum until the tubercles begin to break down. The tubercular cells, which contain the bacilli (or rather *bacteria*) tuberculosis, disintegrate and discharge their contents, which become mixed with the sputum, wherein the bacilli are detected by the use of the proper reagents. As in our case the tubercles must certainly have been undergoing disintegration (for otherwise the perforation would not have taken place), we must infer that the search for bacilli tuberculosis must not be confined to one specimen of sputum ; but that, on the contrary, where clinical phenomena would permit us to entertain reasonable suspicion of tuberculosis, we must make repeated examinations for bacilli.

The time of perforation in our case can, with great certainty, be placed at September 23, 1885, when he experienced a feeling of shock, great pain in his right side and extreme dyspnœa. The shock felt in some cases upon perforation of the pleura is very severe. Dr. J. B. Elliott speaks of one case in which the man said that he felt as though some one had knocked him down. The lung is very rich in elastic tissue, and when the atmospheric pressure in the bronchial tubes becomes equalized by the admission of air into the pleural cavity, the elastic tissue finds no force to keep it in a state of tension and immediately contracts, causing the lung to collapse. At each inspiration more air enters the pleural cavity, and although the air leaves it again, still the cavity enlarges and the heart and opposite lung are crowded to the side of the chest. The affected lung is incapable of expanding, because there is as much pressure on the pleural surface as there is on the bronchial surface. The whole work of breathing is thus thrown suddenly upon one lung, whence arises the distressing dyspnœa, which occurs the moment a lung collapses.

One feature in our case has appeared very extraordinary. There was undoubtedly free communication between the bronchi and the pleural cavity, as the amphoric breathing abundantly testified ; and this passage of air to and fro continued up to about three weeks before his death. There

was a large amount of sero-purulent liquid in the chest all the time, and in contact with this there was a large amount of atmospheric air. Why, then, did not decomposition take place in the liquid? If we expose an albuminous liquid in the open air, decomposition very soon sets in, caused by, or, at any rate, accompanied by, the development in the liquid of various micro-organisms, the spores of which have been deposited in the liquid from the atmosphere. As the liquid in the chest of our patient did not undergo decomposition, notwithstanding the free access of air, we must infer that the air, in passing through the lung, had become deprived of the spores usually floating in the atmosphere. This appeared to me to be the only explanation; and I was confirmed in my belief by reading in the last edition of Green's "Pathology and Morbid Anatomy" the following: "They (the micro-organisms) exist in large numbers on its external (skin) and internal (bronchial and alimentary) surfaces, which are in contact with the air. Inhaled with each breath, they are found in the larger bronchi; but the smaller ones and the alveoli are probably free, for Tyndall has shown that the complement, all air, is pure by its causing a non-luminous gap in an electric beam thrown across a dark room. Further proof lies in the fact that medical empyemata communicating with the lung generally remain free from putrefaction, whilst those from external wound of the pleura always putrefy."

We may ask what causes the absence of these micro-organisms from the smaller bronchi? It would hardly be reasonable to suppose that the liquid that moistens the surface of the bronchial mucous membrane absorbs or sucks out of the air all of its contained zoöspores, although particles of foreign matter are undoubtedly deposited upon the mucous membrane and become incorporated with the lung. The well-known pigmentation of the lungs due to the depositing of carbonaceous particles from the inspired air, will suffice as an example. Again, we read in Sternberg's work on Bacteria that "ozone impairs, and, if maintained long in contact, destroys the activity of vaccine lymph. All germs suspended in the air, capable of developing in solutions of yeast from beer, are killed by ozone." Ozone is thus seen to be a powerful germicide, and if we could only ingeniously contrive to find ozone in the smaller bronchi, we would at once have a convenient explanation of the absence of micro-organisms from these localities, and also of the non-putre-

faction of the sero-purulent liquid found in the pleural cavity. But, when the pleura is broken through, air suddenly rushes into the cavity of the pleura, and it does so at such a rate that the bronchial mucous membrane has not very much time to draw the germs from it, nor the oxygen to be converted into ozone. We must cast about for another theory to explain away this fact. There is plenty of material in the non-putrefaction of the liquid in the pleural cavity, for the erection of a number of theories, but we shall leave theories aside for the present, and rest content with merely restating that, with free passage of air from the bronchi into the pleura, the sero-purulent liquid in the pleural cavity did not undergo decomposition.

During life a mitral systolic murmur was heard, and after death no valvular lesions were found. May not the abnormal position of the heart and the unusual pressure to which it was subjected have given rise to this murmur? This is not improbable, for I have often noticed, in demonstrating to the students the action of the mitral valve by passing a stream of water back through the aorta, that pressure upon the walls of the ventricles would sometimes cause the water to pass between the valvular curtains, and at other times, that pressure upon the middle of the posterior surface of the left ventricle would cause the valve to close perfectly, whereas, without this pressure, water would manage to squeeze between the flaps of the valve.

The effect of pressure upon the walls of the ventricles can be readily understood when we bear in mind the *columnæ carneæ* and their relations to heart-wall and to the valvular curtains. The *columnæ* are attached, by their base, to the wall of the ventricle, and from their apices spring the *chordæ tendinæ*, which are inserted into the free edge and under surfaces of the flaps of the valve. Therefore, when pressure is made upon the heart-wall, the *columnæ carneæ* are pushed a little inward, relaxing the *chordæ tendinæ*, and allowing the edge of one flap to rise a little higher than that of its partner. The opposition of the valvular curtains being thus disturbed, they permit the backward flow of blood between them, thus giving rise to the murmur.

---

A hod-carrier having met with an accident, the town papers report that "Dr. — was called in, but no disastrous results followed up to the time of our going to press."



## Palpitation of the Heart.

BY C. W. HEFFNER, M. D., BELLEFONTAINE, O.

Read before the Logan County, Ohio, Medical Association, June 11, 1886.

THIS is a reflex disturbance of the heart, characterized by great rapidity of movement and irregularity of its rhythm. It is not a disease in itself, but a symptom of a disease.

The phenomena attending the action of the heart present few difficulties in their investigation, compared to those attending the regular contractions and relaxations which begin about the sixth week of foetal development and terminate with the end of life.

This interesting subject has long occupied the energies of able and learned investigators, giving rise to unnumbered experiments and speculations. It were but idle fancy for me to attempt to recount the various theories advanced to explain this constant action of the heart, save as a subject of histological interest.

While we who in this nineteenth century go about our several vocations are, no doubt, nearly, if not quite, as far from the true knowledge of the cause of the regular action of the heart as were our ancient fathers of physic, we are tolerably well acquainted with the various conditions which may regulate or modify its action.

It is quite an easy task to tell how to induce contraction in a living muscle, or one just separated from the organism and not yet having lost its vital properties; but, when questioned as to why it responds to the applied stimulus, we are compelled to acknowledge our utter ignorance.

While we know but little, if anything, of the true cause of this rhythmical contraction, we have some knowledge of the influences which cause its action to continue equal to the demand of the economy, to be irregular, powerful, etc. We all are aware that the action of the heart is not under the control of the will. We can not cause a slow, fast or irregular action at will. Here is a difference between the heart and striated muscles of the body. More than one hundred years ago, Haller stated that the heart contained an inherent irritability of its muscular fibres upon which its rhythmical action depends; yet, he regarded its actual power of contraction as independent. That the heart is independent in its action, is proven partially by the fact that

it will act for a time after entire separation from the organism. It can not be blood circulating through the heart alone, as formerly supposed, that causes the heart to contract, for it will pulsate when empty. It can not be the contact of air, for it will pulsate in a vacuum. The heart can not receive its stimulus from either of the nervous systems alone, for it will act when the connections are severed; or it will continue to act for a considerable time after the animal is poisoned from woorara, which you all know certainly renders the nervous system inactive. It is quite necessary, for the continuance of good health, that the contractions of the heart should be constant, regular and powerful enough to distribute the sustaining elements of the blood to the different nervous systems, as well as other systems.

Now, while we say that there is an inherent irritability in the muscular fibres to continue the contractions after separation from the economy, I do not intend to say that that is the cause of its physiological contractions and relaxations. I simply wish to call your minds to the existence of such a property; that this is an incontestable property of the heart, but that the regular actions are dependent upon other causes.

What causes regular action of the heart?

Erichson taught that the circulation of the blood through the tissues of the heart builds up the nutrition of the organ to such a point that its condition is such as to render its action regular. He states that he has proven this by the ligation of the coronary arteries, which, by shutting off its nutrition, in six experiments caused its pulsations to be suspended in  $23\frac{1}{2}$  minutes; and that by cutting the ligatures and sending the blood to the organ, it resumed its pulsations.

Again, the regular contractions of the heart are provided for, to a certain extent, by the circulation of the blood through its cavities. Divide the superior vena cava, ligate the inferior vena cava, by compression empty the right ventricle, ligate the aorta, when you will find repose of the right auricle first; the right ventricle continues to pulsate in unison with the left, its walls descending toward the center of the heart, when its pulsations are lost; the left ventricle, unable to send its contents through the aorta, will continue to pulsate for about four hours. The deduction to be gained from the above statement is, that while the heart, entirely empty, will continue

to act for a time, the heart *stimulated by the presence of blood within its cavities*, continues much longer in action. Remove the heart from the thorax, empty it of its contents, and it will pulsate for a time and stop; then immediately introduce a fluid within its cavities, and it resumes action. If the fluid be blood, the contractions are slower, more powerful and more regular than if water be used, which causes the action to be quick, irregular and weak. This we might offer as a proof, as we pass along, that palpitation of the heart is oftentimes produced by anæmia. It seems that the heart, while capable of independent action, may be and is excited to action by the fluid which circulates through its cavities. By observation of the heart in action, we will witness the manner in which these contractions occur.

We may first notice a distention of the cavities of the heart due to the influx of blood. This, by the irritation set up in the terminal nerve fibres of the muscles, produces immediate resentment, as it were, followed by contraction; and no doubt the tension of the fibres, due to the distention of the organ, has something to do with the contraction. The whole of the heart being distended at the same time, the action is simultaneous. The necessary regular distention of each cavity causes rhythmical and forcible contraction, and the simple fact that the heart dilates and contracts so regularly from this apparent cause insures regular action so long as no disturbing influence, either in quality or quantity of blood, is present.

The movements of the heart are not under the control of the will, nor any one organ of the body.

The heart is void of general sensibility. Harvey was aware of this. He found, to his great wonder and surprise, when the heart of Viscount Montgomery was exposed, that it might be touched, nay, even handled, without the patient being aware of it. While the heart will act when separated from the body, unconnected with the nerves of the body, it is also true that in its physiological action it is very much influenced by agents which exert their influence over the nervous system. This influence is so prominent that some very eminent writers have argued that its motor power was that of the nervous system. Whether or not it be true that the heart is propelled by the influence of its muscular irritability, it is a truth, too well known to doubt, that any sudden effect on the nervous system materially modifies the action of the heart. Emotion, as is well known,

often produces death by paralyzing the heart. Palpitation may be actuated by such a cause. Exercise, digestion, excessive venery, drunkenness, and many other orders and disorders of life which impoverish the nutrition, will by their action on the nervous system in a reflex manner badly affect the heart, in the course of a long time. This fact gives great interest to the thoughts given to the action of the nerves going to the heart.

The connection between the heart and the nervous system is mainly through the sympathetic system by the pneumogastric. Let us very briefly look over the influence of the nerves over the heart. By two ways are these influences studied. First by section, and second by galvanism. The impression of all nervous stimulus is felt only at its distribution; section anywhere between the point of stimulation and the points of distribution interferes with the effect. The action of the pneumogastric over the heart is that of inhibition, acting in the same relation to the heart that a catch does to a spring.

Therefore, the effect of dividing this nerve is to increase the number of pulsations, but it also weakens them. This nerve is of great importance in the influence it exerts over other muscles, but we are dealing only with its action over the heart. It contains both sensory and motor fibres; and it would thus seem to cause slowing of the heart, but it does not, as we shall find further on.

A moderately strong, interrupted, galvanic current passed through the pneumogastric will stay the action of the heart so long as the current is kept up. This arrest is not from violent and continued contraction of the muscles of the heart, for they are almost perfectly flaccid—paralyzed. This is, after a manner, explained by dividing the nerves, and the alternating stimulation of the ends going to the nervous centres and those going to the heart. If we galvanize the end toward the heart, the heart is paralyzed; while to apply the stimulus to the part connected to the system of nerves, there is no such effect. This influence is said to be through the motor filaments of the pneumogastric; consequently, the woorara poisoning spoken of a moment since, has no power to continue its action, because it paralyzes the motor element of the heart. If we continue artificial respiration and apply our stimulus to the pneumogastric, it has no effect at all. The inhibitory action of the pneumogastric comes from the spinal accessory fibres, but I will not take



time to explain this. This inhibitory function of the pneumogastric is of considerable consequence.

It is very necessary for the well-being of man that the heart should act, at all times, with about the same amount of power. That it may evenly and regularly supply the system with the elements essential for its nutrition. Many causes acting through the nervous system produce irregular action of the heart, viz.: fright, anger, grief, indigestion, etc.

As we have seen, there are powers of independent motion belonging to the heart. There are accessions to these powers from the great centres. There is an inhibitory machine that prevents overaction. This motor and inhibitory power is affected by the state of the vessels, density of the blood, movement of the respiratory organs, by the general activity of the respiratory organs and of the animal and organic functions in general. We have for the maintenance of the heart's action a motor apparatus (rhythmically discharging motor ganglia) situated in the substance of the heart. From the cervical sympathetic and spinal cord come branches that act as excitors of activity, and if stimulated increase the movements of the heart. The pneumogastric, as we saw, acts as a regulator of the heart. The depressor nerves of Cyon and Ludwig (formed by a branch coming from the pneumogastric, and a branch of the superior laryngeal nerve) shows its action in the dilatation of the blood-vessel.

The dilator and constrictor of the sympathetic act by increasing or decreasing the tension of the vessels.

If the peripheral vessels dilate, less work is performed by the heart; if, however, they contract, then the work of the heart is greater.

The machinery governing the action of the heart may be modified and interfered with in many ways and by many causes, viz.: muscular exercise, inhalation of gases and impure air, ascending and descending hills, mediastinal tumors, gaseous distention of the stomach, effusions into the thorax, general calcareous degeneration of the arteries, moral and emotional influences, as grief, hope, anxiety, fear, and *rarely* "overstudy;" reflex troubles, as uterine disorders, worms, gastralgia, teas, coffee, etc., in excess, as well as whisky and tobacco. Many diseases affect the heart in a similar manner, as typhoid fever, in which we have a flabby heart, often giving rise to palpitation. Gout gives rise to palpitation of the heart, which is most frequent when the symptoms are receding, at which times there occur anxiety, difficulty in

breathing, constriction of chest, intermission in pulse, weak, thready pulse, exceedingly slow or rapid pulse. When spinal irritation affects mostly the upper half the cord, we have always more or less palpitation.

Atonic dyspepsia has as a close follower, palpitation of the heart, usually occurring in an irregular manner and without any disease of the heart itself; is easily induced by slight exertion, but is common in its spontaneous occurrence.

Chronic gastritis or catarrh of the stomach, each have palpitation of the heart for symptoms, and with slight excitement becomes most painful. Exophthalmic goitre has, for its first noticeable symptom, a palpitating heart. Graves records a case in which the beats of the heart could be heard quite a distance from the patient.

We will say little of the condition of the heart in rheumatism, for, being so common and so important, I take it for granted you all well understand it.

In all diseases of heart itself, we have at times, overaction, valvular disease, hypertrophy, dilatation, etc. In the diseases common to the aorta, we find palpitation present in the vast majority of cases.

There is accompanying palpitation of the heart, uneasiness, præcordial oppression or dull pain. Few patients have any regular or fixed times of attack. During the attack the heart beats furiously, dyspnœa, anxiety, a sensation as if choking—patients are rarely ever able to lie down. Vertigo, faintness, flashes of light before the face, face either pale or flushed, but always anxious.

These symptoms last from a few minutes to several hours. There is, after an attack, usually, pale urine and great stupidity of the patient. With the treatment I might consume many pages, but will simply say that prophylaxis is the most important. If possible, at all times and in all cases remove the cause, of whatever nature. Surround the patient with good sanitary conditions, good air, clean apartments, good food, etc. See that the general health is good, if it can be made so. During the attack, for relief administer morphia hypodermically, amyl nitrate inhalations, ether, chloroform, if there be no organic lesions. All of these remedies afford prompt relief in the vast majority of cases.

For permanent cure remove the exciting and predisposing causes if possible; and if this can not be done, palliate the best you can with the best remedies suggested by the cause.

## Translations from Our Foreign Exchanges.

Translated for MEDICAL NEWS, from the French, by Dr. Illovy,  
Cincinnati, Ohio.

### ON THE TREATMENT OF LUPUS ERYTHEMATOSUS WITH A MIXTURE OF VINEGAR AND YELK OF EGG.—BY DR. BROCY.

In 1883 I had the opportunity of observing a woman about fifty years of age, suffering from an obstinate erythematous lupus of the left cheek and nose. She had been under treatment for a very long time already with various physicians. Dr. Vidal scarified it, and Dr. Leloir both scarified and cauterized it. She had likewise undergone the application of all the various plasters\* and of black soap. All these therapeutic procedures availed but little. I obtained a certain amount of amelioration with profound and serrated incisions, and then the improvement stopped and the patient would not undergo any further treatment. Two or three months afterward I saw her again and found that her lupus was much improved; she informed me that she had used as a topical application a mixture of vinegar and yelk of egg, which she had been advised to do by a nurse of the Hospital St. Louis.

I did not at the time attach much value to the information, and attributed the apparent improvement of her malady to one of those capricious and frequently unknown evolutions of this disease. But this year new facts that have come under my observation taught me that this medicine has a real value.

About the month of December, 1884, I had under treatment a patient forty-five\* years of age who suffered from the most extensive erythematous lupus that has ever come under my notice. Both cheeks in their totality, the lateral parts of the neck, and many parts of the hairy scalp were involved. The dermis was a bright red, very much infiltrated, and the borders of the lesions were prominent; it was apparent that the morbid process was in full activity. I advised that he apply an ointment of black soap, and with this a certain amount of amelioration was obtained; but being engaged in commerce he soon tired of this treatment, his malady became aggravated, and in April, 1885, he entered the Hospital St. Louis. Dr. Barth made applications of pyrogalllic acid, then Dr. Vidal made repeated applications of black soap. The results of these treatments were suffi-

ciently satisfactory. The infiltration of the dermis in the neighborhood of the lesions diminished. Nevertheless, the black soap ceased to have any further effect, and Dr. Vidal was about to make scarifications, when about July he was compelled to quit the hospital on account of his health. He then came to see me again. I wanted to scarify it, but this was impossible, for after the first incision he refused to permit any other to be made. Black soap could not be further applied, as it was without effect. I thought of re-applying the pyrogallic acid. But this somewhat violent application the patient refused to permit.

The applications of pyroligneous acid which I had directed in December in place of the black soap, had caused such a violent inflammation that he would not think of such a thing. I was very much embarrassed, therefore, when he mentioned to me that a nurse in the Hospital St. Louis had recommended to him the application of vinegar and yelk of egg. I then recollected what I had been told by the old woman in 1883, and was the more disposed to try it, as I had learned from others that in England and America wood vinegar and ethylate of soda had been used with success in lupus erythematosus. I had him make the application of a mixture of vinegar and a yelk of egg. The effect was much more satisfactory than even with black soap. The pain caused was much less, according to the statement of the patient, and the inflammation resulting much more regular. Since the two months and a half that he is using this application, I have seen a gradual amelioration, which is so great that at the present time large spots of healthy skin can be seen on the cheeks, still the cure is not yet complete.

Fifteen days after commencing the treatment in the last-mentioned patient, and struck by the results so quickly obtained, I made use of the same treatment in the case of a chambermaid thirty years old. She had already been treated for and cured of an erythemato-acneous lupus of the forehead and root of the nose by Dr. Vidal, about six years ago. Since about two years and a half she has noticed a fresh lupus erythematosus of the cheek coming on, which at present has invaded the whole cheek.

She was scarified many times and the disease became stationary; she then suspended treatment. Seeing, however, that the disease was again becoming worse, she came to see me in December, 1884. I scarified several times and thus arrested the progress of the disease; but she did not come



regularly for treatment, and as soon as she was somewhat better, stopped it altogether. About May, 1885, I advised her to apply black soap; but she did so unwillingly because she found the pains caused by it too severe. In October, 1885, I advised her to try the vinegar and yelk of egg; her lupus was certainly better when she began treatment, but it was far from being cured. Six weeks afterward she came to see me, and not a vestige of the lupus was present, the skin was supple and had resumed its normal aspect and consistence over the whole cheek.

At this time this method is being experimented with by Dr. Vidal in the Hospital St. Louis.

Up to the present I have used two methods, each of which has its advantages and disadvantages.

The first procedure consists in making a fluid mixture of the yelk of a fresh egg and an equal part of the ordinary vinegar of the groceries; the whole is beaten together and allowed to macerate for a certain time (my second patient allowed it to macerate for twenty-four hours.) Every evening before going to bed, two layers of the mixture are applied with a brush over all the diseased parts, taking care not to pass beyond the edges. If it be found that the consecutive inflammation is not sufficiently strong, four layers may be put on; the next morning the parts are washed with black soap; if the patient can not treat himself through the day, nothing is put on, or perhaps only a mild zinc ointment. In the evening the application is renewed. It is better, however, for the application to be made morning and evening if a too strong inflammation does not follow. If it does, the treatment is suspended, and if necessary, the irritation may be allayed with warm poultices or with vaseline. When subsided, treatment is resumed. If the application does not act sufficiently forcibly, or has no effect at all, a few drops of pure acetic acid or pyroligneous acid can be added to the mixture; the irritant effect of the topical application can thus be graduated. The procedure is therefore convenient, and a patient of any intelligence can easily regulate it himself. This was the method employed by the second patient; the vinegar and egg alone sufficed for the face, but for the hairy scalp a few drops of acetic acid had to be added.

The second method, a little more complicated, and according to my idea more energetic, was used by M (the second patient) at the outset. It was by strictly following the rules

of the last procedure that the last patient was cured. It consisted in hardening eggs, taking the yellow, tritulating it with ordinary vinegar so as to make a paste sufficiently soft to be spread upon flannel, but not diffuent enough to flow over on to the healthy parts, it may be allowed to macerate (but as to the necessity of this I am not certain) from four to ten hours, adding the vinegar gradually to the mixture. In this way, I believe, a stronger paste is obtained. It is then spread upon flannel, having the shape of the wound, but passing beyond its edges a few millimetres; this detail is the most important, because it is necessary to act upon the edges, to prevent the further extension of the disease. The ointment, as directed, is put on at night before going to bed and allowed to remain all night; in the morning the parts are washed with black soap. If the inflammation is not too severe, and if the occupation of the patient permits, another plaster is put on, which is again renewed at night.

Although my experience is somewhat limited, I can nevertheless say that I have seen both of these methods act without much pain, set up an inflammation easily borne by the patient, and followed by a most marked improvement.

I have certainly no intention of indicating a heroic treatment for lupus erythematosus. I only desire to call attention to a remedy, practicable, easy, very cheap, within the reach of everybody and to be had in every land, and which is certainly not inferior in efficacy to any of the remedies at present in vogue for the treatment of this disease. From what I have seen, it seems to me, that in certain cases, at least, its action may be favorably compared with that of black soap.

The reader will have remarked that I have in this article confined myself to lupus erythematosus. It is because I do not know what effect it may have on lupus tuberculosis. This point I reserve for further investigation.

It is well known to everybody what a capricious affection lupus erythematosus is, and how difficult to treat; it is necessary to change the medication frequently, for in almost every case, any plan of treatment will only be effective for a short time. It is with pyrogallic and pyroligneous acid (both excellent local remedies), as with scarifications, their application can not be intrusted to the members of the patient's family; the supervision of the physician is necessary. The applications of the black soap, or of the yolk of egg and vinegar mixture, with instructions sufficiently de

tailed, can be made by everybody with a little care and prudence. And if we have in the means here indicated, and the subject of this article, a really efficacious remedy, which can be alternated with the black soap, it will be at once apparent to everybody what an immense service is thereby rendered to the therapeutics of lupus erythematosus.

In a word, the mixture of vinegar and yelk of egg seems to me to present the following advantages:

It is well borne by the patients who do not find it too painful, and they can themselves graduate its strength with great facility.

If managed prudently it does not cause too severe an inflammation, although an inflammation sufficient for the purpose is caused by it.

It is an efficient and practical agent which can be alternated with other well-known methods, and particularly with black soap or with scarifications.

It is cheap, within the reach of everybody, and does not require the incessant supervision and intervention of the physician.—(*Journal de Medine de Paris*, No. 3, January, 1886.)

---

## Selections.

---

### Scarlatinal Nephritis.

---

It is a striking coincidence that the two most important contributions on the subject of scarlatinal nephritis that have ever appeared in this country were published within a few days of each other; the one a chapter on the subject in Dr. Purdy's recent work on "Bright's Disease and Allied Affections," the other an article on the subject by Dr. I. E. Atkinson, of Baltimore, in the July number of the *American Journal of the Medical Sciences*. Of the various dangerous complications and sequelæ of scarlet fever none are more important, or more dangerous to immediate or subsequent life and health, than the derangements of the kidneys. A number of careful observers hold that the kidneys are always affected in scarlet fever; that nephritis is as essential a feature of the disease as is the rash of measles. However this may be, it is certain that there is an enormous

number of cases of nephritis arising from scarlatina, and it is a clinical fact that almost all fatal cases of scarlatina present renal symptoms.

It has been held that while a very large percentage of cases of scarlatina present albuminuria, all these are not truly nephritic. It is not necessary to claim that each case of albuminuria arising in the course of scarlet fever is due to an actual nephritis, but it is certain that a very large number of the cases of so-called pyrexial albuminuria occurring in scarlet fever are nephritic, and accompanied by nephritic lesions. There are cases also in which nephritic lesions are found at the autopsy, though albumen may not have been present during life. To still further show the importance of the subject, we have no means of knowing the particular cases of scarlet fever which are most likely to be accompanied or followed by nephritis. Various symptoms have been pointed out which were supposed to indicate that the kidneys were or would be involved, but with the exception of those mentioned by Mahomed they seem to be valueless; he insisted that the nephritis of scarlet fever is preceded by increased arterial tension, constipation, and the presence of blood-crystalloids in the urine (which may be recognized by means of the guaiacum test). There are pathological reasons for supposing that future observation will probably confirm this statement. But it is not our intention to speak exclusively of those cases of scarlatinal nephritis which arise during the course of the primary disease, or which are already distinctly recognizable before the disease has passed off. There are some cases in which the primary disease has occurred years before, and has probably been almost forgotten by the patient or the family; the physician is called to treat a case of dropsy, which is ascribed to a transient disorder occurring but a short time before. Or it may be that the patient is suffering from cardiac hypertrophy with slight albuminuria, or he has albuminuric retinitis, and a careful examination will disclose a history of scarlet fever as many as ten or fifteen years previously. In these cases we must believe that nephritic symptoms occurred during the primary disease, but were unrecognized and have pursued a latent course until they have now passed into the chronic form. It will be seen, then, how necessary it is to continue treatment, and the most careful supervision over the patient, until all evidences of the disease have disappeared. And not only this; but



no one should fail to keep a most careful watch over the kidneys in a case of scarlet fever, however mild it may be.

It is of the utmost importance that every case of scarlatina be treated with a view of preventing renal complications; this should be done from the beginning of the disease. The urine must be examined daily in every case, especially during the second, third and fourth weeks; it is not sufficient to examine for albumen, but evidences of renal disease must be watched for with the microscope—for, as has already been said, renal disease may be present though albumen be temporarily absent from the urine. When nephritis is present, the urine contains renal epithelium, casts, and generally some blood corpuscles, the casts being cylindrical, hyaline, or epithelial. This examination should include a portion of the whole urine passed during twenty-four hours. It seems scarcely necessary to go into the refinements of chemical and microscopic examinations in these cases, except to determine, if possible, the extent to which the kidneys are damaged; for when renal epithelium, casts, blood corpuscles, and possibly albumen are found in the urine of a case of scarlatina, we need scarcely hesitate as to the diagnosis. It would be well also to take a sphygmographic tracing of the pulse regularly, if for no other purpose than to determine the correctness of Dr. Mahomed's statement in as many cases as possible. In cases in which the scarlatina has been overlooked on account of its mild character, there may be doubts as to the form of the renal lesion present; in these cases much may be done by obtaining a history of recent scarlatina in the family or the vicinity, and by careful examination of the patient for evidences of desquamation or of recent sore throat.

This fact that scarlatinal nephritis is of rare occurrence in the first year of life seems in a measure to give at least one indication for treatment, since it is in this year that the patient's food is almost exclusively milk. Jaccoud said about a year ago that for fifteen years he has not had a case of nephritis among his scarlatinal patients, and he attributes this to his exclusive milk diet. It should be used from the beginning of the attack until the end of the fourth week. The patient should be carefully protected; Mahomed declared that a slight chill during convalescence is sufficient to cause albuminuria. Daily baths or tepid sponging should be practiced during the height of the disease, and by this renal complications are frequently avoided. In the mildest

cases the patient should be kept in bed for at least a week after the fever has subsided; and he should not be permitted to leave the room before the end of the third week. During convalescence the daily tepid bath or sponging should be practiced until desquamation is completed, as a measure of precaution against the spread of the disease. Active purging is unnecessary, but it should be remembered that a condition of constipation may raise the blood pressure and hastens renal inflammation; and Mahomed held that the failure of the bowels to move on a single day was sufficient to cause high arterial pressure and its results. Certain authors recommend the internal administration of chlorate of potash and salicylates in scarlet fever; they should not be used, nor should any drug be given which is known to be a renal irritant. With the first symptoms of renal trouble we should begin the administration of digitalis, as there can be no doubt that it is the most powerful drug that we possess in dealing with scarlatinal nephritis. Other useful diuretics are the citrate, acetate, bicarbonate and bitartrate of potash. Dr. Atkinson especially recommends a lemonade made by adding one drachm of cream of tartar to a pint of boiling water into which a lemon, cut into thin slices, has been dropped. This quantity, properly sweetened, may be taken by a child five years old during the day. Pure water is also an efficient diuretic, and may be given freely. It is in the anuria, or threatened anuria, of scarlet fever that the alkaline salts are most useful. The convoluted tubes are now blocked up with colloid matter, and as colloid matter is dissolved when brought in contact with an alkaline solution, the indication is clear. The salts of potash formed with vegetable acids are most desirable in this case. The salts of sodium are less efficient than the potash salts, but in some cases they may be used with advantage, especially when it is desirable to render the urine alkaline for a considerable time. Here the acetate of sodium or the effervescent citro-tartrate of sodium may be used. More pleasant than these, and equally efficacious, it seems, are the granular effervescent citrate of potassium and citro-tartrate of sodium and citrated kali.

Attention should be paid to the proper action of the skin. The hot pack, wet or dry, is very useful; but care is demanded that sudden chilling do not occur. In cases of threatened uræmia, jaborandi or pilocarpin will often prove useful; but one must not forget the effects of these drugs

on the heart, and the danger of inducing collapse. Should uræmic coma or convulsions occur, they should be treated without reference to the primary disease. It seems necessary to say that the most efficient means of treating uræmic convulsions is by the subcutaneous use of morphine; it is very much more efficient than chloral in uræmic convulsions from any cause. It is not, as many suppose, dangerous to life. The cardiac complications in scarlatina should receive prompt attention. When the area of cardiac dullness begins to extend, the second sound becoming more accentuated, and the apex impulse changing its position, digitalis should be administered. Should the symptoms of hypertrophy continue, it is well to add convallaria to the digitalis; the fluid extract of the leaf in three to ten drop doses. There is reason to hope that in those grave cases in which hypertrophy has passed into dilatation, we have an efficient drug in strophanthus, which is a more powerful and rapid cardiac stimulant than digitalis, but it is unsuitable as a substitute for digitalis in the general treatment of scarlatina. Its action seems to be wholly on the cardiac muscle, it having little or no action on the arterioles. It will aggravate rather than be of service in those cases in which nephritis is very acute and the urine very bloody.—*Journal of Amer. Med. Association.*

### Eclampsia.

THE most notable contributions which have recently appeared on this important subject are the chapter on puerperal nephritis in Dr. Purdy's excellent book on Bright's disease, and a lecture by Leyden, "Ueber Hydrops und Albuminurie der Schwangeren," published in the *Zeitschrift für Klinische Medicin*, Bd. II., Heft I, 1886.

An examination of these papers justifies the following conclusions:

1st. That the majority of cases of puerperal eclampsia are accompanied by albuminuria or dropsy, or both, but a certain number are unaccompanied by either.

2d. That the majority of cases are associated with and are the direct result of kidney disease.

Thus, out of 135 cases of eclampsia collected by Brummerstaedt, of which 51 were fatal, there was albuminuria in 106, or less than 80 per cent.; in 29, or more than 20 per cent., it was absent. Again, according to Schröder (*Text-*

*Book of Midwifery*, edition of 1884), from 3 to 5 per cent. of pregnant women have albuminuria; but of women in labor a much larger proportion have it — according to Flaischlen 17 per cent., to Würst 20 per cent., and to Mörike 37 per cent.; the proportion of albumen varying greatly and being often very small. According to Rosenstein, out of every 8 cases of albuminuria in pregnancy, 1 has eclampsia, and according to Schröder, 1 woman out of every 500 confined has convulsions. It is evidently impossible to draw any further conclusions from these statistics than that, while not every case of albuminuria in pregnancy is going to be a case of convulsions, the presence of albuminuria makes it more likely that there will be convulsions, a fact which is of great practical importance.

How is it with dropsy? Leyden very correctly says we know less of the relation between the albuminuria and the dropsy of pregnancy, although it is certain that the two do not stand in a necessary corresponding relation; and it is true, also, that anasarca is much more frequent in pregnancy than albuminuria, there being a not inconsiderable number of cases of œdema gravidarum without albuminuria, while it is equally true that albuminuria may occur without dropsy. Leyden is inclined to believe that where albuminuria and dropsy are both present, as a rule the dropsy precedes and the albuminuria follows, while Frerichs regards the albuminuria as preceding, in our opinion rightfully, where the two conditions depend upon renal disease.

And this brings us to the second and most important of our conclusions—the relation of eclampsia to kidney disease. Both albuminuria and dropsy betoken some obstruction to the circulation in the kidneys, and very early it was suspected that the kidneys were at fault. Such suspicion was soon justified by the results of autopsies, first by Rayer, but subsequently by many others. The precise relation of the two conditions and the proportion of cases of albuminuria or dropsy, or both, in pregnancy, to alterations in the kidney, is still unsettled in the minds of many.

With a view of getting at this a little more precisely, let us return for a moment to the question of the relation of albuminuria and dropsy to renal disease. It has been said that both point to a derangement of circulation in the kidneys, but this is not true of both in equal degree. We may say of albuminuria that in all cases except where it is due to pus from some part of the genito-urinary mucous surface, it



is the result of such deranged circulation. But not so with dropsy. It is well known that we may have dropsy from obstruction to the circulation elsewhere than in the kidney, and such obstruction may occur in pregnancy, indeed it is much more prone to occur in pregnancy than in the non-pregnant state, by reason of the pressure exerted by the gravid uterus. This is a very different thing from saying that the renal changes are the result of the pressure exerted by the gravid uterus, which we do not at all believe. As the result of our belief, however, we regard dropsy without albuminuria in pregnancy as a much less serious symptom than either albuminuria alone or dropsy with albuminuria. Indeed, we may go farther and say that, where there is dropsy in pregnancy without albuminuria, we may conclude that the kidneys are not seriously involved, and that the danger of eclampsia is less, so well assured do we feel that, where there is renal disease in connection with pregnancy, the albuminuria must be present either alone or in connection with dropsy. It is true that Bright's disease may occur in the non-pregnant state accompanied by very small albuminuria, or even without albuminuria. But in these forms of kidney disease the process is a very slow one as compared with Bright's disease, the result of pregnancy, besides being, as a rule, of a different nature—being interstitial from the beginning; although some observations of Leyden, presently to be referred to, go to show that cirrhosis of the kidney may also result from pregnancy.

Reiterating that by far the largest proportion of cases of eclampsia are the result of renal disease, are we able to foretell the precise alterations—in other words, the form of Bright's disease—present? The most recent studies seem to necessitate some change of view as to the form of kidney disease present. Dr. Purdy gets over it very nicely by calling the disease puerperal nephritis, and his account of the morbid anatomy is very brief. For the purpose of treatment perhaps it is not necessary to be more precise. But the demands of modern medicine require us to be as precise as possible. Both Rosenstein and Bartels regard the disease as an acute parenchymatous nephritis. Undoubtedly many cases of puerperal nephritis are recognized in the stage of acute parenchymatous nephritis. In such there is blood in the urine, and blood casts, and much albumen. But at the stage at which death occurs and autopsies are obtained, it is more frequently the second stage of the dis-

ease which is found. Dr. Purdy correctly says: "Hemorrhagic extravasations are less frequent and pronounced than in other forms of acute nephritis, especially the scarlatinal form; yet patches of migrated blood corpuscles may sometimes be seen between the convoluted tubules and about the glomeruli. Epithelial cells lining the convoluted tubules are seen to be swollen, and in some places they have become fatty." Three out of four of Leyden's autopsies discovered fatty degeneration of the cells lining the tubes of the cortex—in a word, the second stage of chronic parenchymatous nephritis. The blood-vessels and interstitial tissue were intact. Leyden reports two cases with a view to showing that the Bright's disease of pregnancy may also be represented by the granular kidney. One case is based on the clinical history, which certainly coincides with that of granular kidney in general; the other is confirmed by autopsy. The pregnancy was normal, except that there was much sick stomach, until eight days before confinement, when swelling of the feet and legs with scanty urine was noted. The labor was natural. Eight days afterward, on rising, the patient noticed her feet swollen, but two weeks later the swelling had disappeared. Then followed a period of apparent health, except that the patient was weak. Then followed morning sickness, headache, weakness, retinitis albuminuria, and the diagnosis of contracted kidney by the oculist consulted. Convulsions finally set in, and the next day the patient died, seven months after confinement. Might not both of these have been cases of previously existing granular kidney, or of the disease developed from its usual causes?

A most important question naturally succeeds the discussion of our second conclusion: Is eclampsia always associated with or dependent on kidney disease? In determining the correct answer to this question, there are many sources of error. In the first place, all negative observations prior to the careful use of the microscope, which has characterized the practice of the last twenty years, must be disregarded, as well as all negative observations of a later date, based on other than microscopic examination of the kidneys. We fear this must be the fate of the 106 cases of eclampsia collected by Ingerslev, cited by Schröder, in none of which was there albumen, while at the autopsies the kidneys were found entirely normal. Cautiously, too, should be regarded a case cited by Leyden, as reported by Schulz

in an inaugural thesis in 1867, in which the kidneys were found anatomically intact. But Leyden himself, in the paper referred to, says that, in a single case of fatal eclampsia from which the kidneys were sent to him for examination, he found nothing abnormal; and says also, "the fact that eclampsia may go on to a fatal issue without the kidneys presenting any anatomically demonstrable alterations, is equally true as that eclampsia may occur without albuminuria."

With such statements from such authorities, we dare not, perhaps, deny the possibility of the occurrence of fatal eclampsia without accompanying Bright's disease, but we feel justified in asserting, emphatically, that such cases must not only be exceedingly rare, but even impossible where albuminuria is present, and, further, that to base any therapeutics on the supposition that such is the case, is almost criminal.

Such rare cases may be of the following kind. In the first place, there can be no doubt that we sometimes meet cases of puerperal convulsions without albuminuria or renal involvement which are analogous to the convulsions of teething or gastric irritation in childhood. They occur most frequently in primiparæ, and often in prolonged labors, where the uterine tissues have been teased to such an extent by the pressure which has been exerted upon them, that the nerve centres with which they are in connection become excitable and explode in convulsions. It is not unlikely, too, that the nerve-centres of pregnant women are like those of children, physiologically more excitable than in the normal state. Such cases are apt to have only one or, at most, two convulsions. It is not impossible, also, that occasionally one of these may terminate fatally, just as reflex convulsions from other causes terminate fatally. But, certainly, such terminations are exceedingly rare in this class of cases. Further, the whole category is so small that, in treatment, their special causes may be ignored, and the cases treated by bleeding and anæsthesia as though they were uræmic.

On the importance of the diagnosis by a study of the urine of an existing Bright's disease in a pregnant woman before labor sets in, it would hardly seem necessary to say anything at the present day, but for the fact that women continue to be sacrificed to neglect of such examinations, who might have been saved by a treatment directed to the complication.—*Phil. Medical News.*

## A Case of Rupture of the Bladder; Laparotomy.

(UNDER THE CARE OF MR. J. DUNCAN.)

FOR the following report we are indebted to Mr. Henry B. Melville, resident surgeon:

Wm. E——, aged thirty-eight, was admitted at 10 P. M. on May 5, 1886. The patient stated that about 5 P. M. that day one of the wheels of a cart, which with its contents weighed about 25 cwt., had passed over the lower part of his abdomen. He complained of abdominal pain of a somewhat spasmodic character, and aggravated by movement. He said that he had passed no urine since about four o'clock, and that he felt intense desire to micturate, but was unable. A history of stricture was obtained.

On examination, no evidence of fracture of the pelvis or of injury to the spine was found, but there was considerable bruising and abrasion of the front of the thighs at the upper part. The abdomen was distended, resonant, and very tender to touch. There was no absolute dullness over the pubes. An attempt was made to pass a catheter. From the presence of an extremely tight stricture near the triangular ligament and numerous false passages, it was found impossible to pass the smallest instrument, even after the use of a hot bath and morphia suppository. The patient while in the bath passed a small quantity of blood-stained urine with great difficulty. No further attempt was made to pass instruments that night. The patient slept for about nine hours, and awakened with the pain still unrelieved. In the morning the temperature was 98.8°. There was vomiting with distention and tenderness of the abdomen. The pulse was regular, but rapid, small and hard. At 2:30 P. M. Mr. Duncan saw the case, and tried, without success, to get an instrument into the bladder. Aspiration over the pubes was performed, but no fluid came through the canula. Chloroform was administered, and a full-sized bougie was passed down to the stricture and cut down upon. The stricture was divided on a probe, and Mr. Duncan passed his finger into the bladder and was able to explore all its extent except the upper part of the posterior wall. Pressure above the pubes and on the anterior wall of the rectum failed to bring that portion of the bladder within reach of the finger. The fluid which escaped from the bladder when it was opened appeared like turbid urine and was small in



amount, and afterward there came away a quantity of material which looked suspiciously like semi-liquid fæces; but no fæcal odor could be detected. Fluid injected into the bladder through the perineal wound was only partly returned. Mr. Duncan now considered the existence of a rupture of the bladder almost certain, and thought it possible that the presence of what looked like fæcal matter might be accounted for by the existence of a rupture of some part of the intestine. He therefore determined to open the abdomen and thoroughly wash out all urine and other foreign matter, and examine the bladder from above, and as far as possible the intestine. When the transversalis fascia was reached, it was seen bulging forward with fluid behind. When the opening was completed a strong rush of blood-stained fluid took place. The exploring hand detected a rupture on the upper and posterior part of the bladder wall. It was about two inches and a half in length, and ran from above downward and to the left. No injury to the intestine could be made out, and no material similar to that which came from the bladder was found. The abdomen was thoroughly washed out with hot water, a glass drainage-tube passed into Douglas' pouch, and the rest of the wound was closed by gut sutures. A drainage-tube was passed into the bladder through the perineal wound.

After the operation the sickness still continued. The pulse was weak and rapid, respiration also rapid; but the patient stated that his pain was very much less than before operation. Urine passed freely by the tube in the perineum, and a small quantity of blood serum was from time to time sucked up through the glass tube from the abdominal cavity. Next day (Friday, May 7th), the patient's pulse had improved, and the pain was still less. There was still some distention of the abdomen, with tenderness on pressure; but the patient passed flatus freely. The temperature, normal at midday, was 99.6° F. at night, and the urine was flowing freely from the perineal wound. Toward evening it was observed that the flow of urine was lessening, and after midnight it ceased entirely. The sickness still continued, and nutrient enemata were given throughout the day. The amount of serum drawn off from the abdomen was less, and there were some lymphic flakes in the discharge.

The following day, May 8th, the suppression of urine still continued; the patient was visibly weaker, and was still

vomiting. Respiration shallow, rapid, entirely thoracic; pulse weak (120). No pain except on vomiting. During the day the following medicine was repeated every two hours: One drachm of sulphate of magnesia, ten grains of carbonate of magnesia, in half an ounce of peppermint water. In the afternoon the sickness had very greatly abated, the patient being able to tolerate small quantities of iced champagne by the mouth. By the evening the patient's condition had somewhat improved, and the pulse was less rapid and fuller. The suppression of urine still continued, though constant hot fomentations were applied to the loins, and repeated dry cupping was resorted to.

9th.—Early on Sunday morning the patient became rapidly more collapsed, with cold extremities and scarcely perceptible pulse. Ether was given hypodermically and the amount of champagne increased, and the patient rallied for a few hours, but in the evening he again sank, and complained of increased abdominal pain. About 8 P. M. one-third of a grain of nitrate of pilocarpine with twenty minims of sulphate of ether was given hypodermically, but produced no sweating, only profuse salivation. The patient died at 9 P. M.

At the *post-mortem* examination the body presented the following appearance: There was very little peritonitis, but around the drainage-tube some matting together of the intestines. There was a considerable effusion of blood behind the peritoneum on the left side, extending as high as the left kidney. No communication existed between the rectum and the bladder, and no rupture of the bowel at any point. The bladder wall was thickened and fibrous, with numerous hæmorrhages into the submucous tissue. There was in the posterior wall to the right side a rupture, about two inches in length on the peritoneal, and an inch on the mucous aspect of the bladder. The margins of the wound were beginning to unite, but the adhesions were soft and easily broken down. A dense mass of cicatrical tissue was seen in the urethral wall in front of the bulb, at the seat of the stricture, and several old false passages. The kidneys were pale, cortex thickened, capsule slightly adherent at points, indicating probably some interstitial change with fatty degeneration of the epithelium of the tubules. Liver fatty; hypostatic congestion of both lungs; some thickening of the wall of the left ventricle of the heart; valves competent.—*Lancet, of London.*

## Diphtheria.—Whooping Cough.—Resorcine.

BY JOHN MORRIS, M.D., OF BALTIMORE.

ABOUT six weeks ago I was called to see a little boy who who was suffering from a sharp attack of whooping-cough. The disease had progressed to the third week. He had high fever, which I first thought might be due to an intra-current bronchial trouble. On examination of the premises, however, I came to the conclusion that the fever was due to malaria or some zymotic cause. The house was built directly on the ground, and the walls were damp and covered with mold. I have frequently observed cases of diphtheria in which there was no history of contagion, but in which I believed I could trace the origin of the disease to conditions such as I observed in this house. Dampness I have always thought a most important factor in outbreaks of diphtheria. On my second visit to my little patient I discovered the characteristic membrane of diphtheria covering both tonsils, which extended afterward to the pharynx. The boy suffered from fever for three or four days, but made a good recovery. The whooping-cough, strange to say, ceased entirely from the time of the appearance of the diphtheria and has not returned since. This is not a mere coincidence, for the child's sister, who was isolated and did not contract diphtheria, is still suffering severely from pertussis. My theory as to the cause of the disappearance of the whooping-cough, is that the micrococci of this disease, which have their harbor in the lining membrane of the pharynx and air passages, were destroyed by a more vigorous parasite, and this would tend to strengthen the views of Professor Moncorvo, who strongly urges the use of resorcine as a local application to the surfaces involved. Professor Moncorvo believes, 1. "That whooping-cough is to be classed among the diseases which are caused by the irritation excited by the presence of parasites. 2. That it is due to the presence of micrococci, which proliferate in large numbers upon the lining membrane of the larynx and pharynx, and which infiltrate the epithelial cells, which seem to be the preferential seat of their growth and increase. 3. That resorcine, in a solution of the strength of one to two per cent., applied directly to the mucous surfaces concerned, has been found in all cases in which it has been employed and the results watched to

rapidly reduce the number of chinks, to reduce their intensity, and finally to lead to the cure of the disease." The application is made by means of a brush or swab, and the interior of the larynx can be reached by a spray.

I have no doubt myself as to whooping-cough being a parasitic disease, and that it will prove eventually a curable one. Resorcine may not be the best agent, but some remedy will be discovered that will prove entirely efficacious. Dr. Barlow, who accepts Professor Moncorvo's views, thinks that orcine, the congener of resorcine, may be a better application, inasmuch as it is milder and less irritating.

The whole subject is worthy of study and investigation, and all clinical observations that throw any light on the matter should be received with attention and interest. It is with this view that I write this very brief paper. Perhaps the "Wilson Sanitarium" may afford a field in the future for the discovery of the origin of many infantile diseases, the exact nature of which we are ignorant.—*Maryland Medical Journal*.

---

### Dilatation of Stricture of the Œsophagus After Gastrotomy.

---

THE advantages to be derived from an operation by which food can be introduced into the stomach, notwithstanding the presence of a stricture of the œsophagus, are well recognized, but the value of the operation of gastrotomy will be greatly enhanced if it can be made the means of curing the stricture itself. Several surgeons have made attempts in this direction. Bergmann and Schattauer, for example, have succeeded in passing bougies through a stricture of the œsophagus from below upward; and Weinlechner has passed a delicate sound down through the stricture and out of the opening in the stomach. Another method of utilizing the gastric fistula consists in passing a slender sound from above the stricture, and out of the artificial opening, then attaching a thread to its upper end and drawing after it larger instruments. This method has been employed by Weinlechner, who used the thread to draw into the stricture pieces of drainage-tube, which were allowed to remain in position, in the hope that their elasticity would have the effect of steadily dilating the stricture. In the only case in which he did this the patient died of tuberculosis. A similar pro-



cedure is described by von Hacker in a monograph on operations upon the stomach, published this year. His plan was to attach a drainage-tube to a slender sound, and draw it through the stricture in a state of extension. He believed that when the tube was no longer stretched, it would regain its previous caliber and produce active dilatation of the stricture. It does not appear that this plan has ever been put into practice; and it is easy to see certain objections to it, as, for example, that the elastic tube might break; that its end might double over at the point at which the thread was tied and injure the diseased part of the œsophagus; that it might, if small, become wrinkled and not expand at all; or, if thick, that it might become intolerable or dangerous to the patient.

An apparently much better method has recently been proposed and used by Maydl, who describes it in the *Allgemeiner Wiener Med. Zeitung*, for June 15, 1886, as follows: He introduced through the cicatricial stricture of a patient, twenty-two years old, a fine bougie, No. 5; he then anæsthetized the patient, passed a sound into the opening in the stomach which he had dilated with a sponge tent, found the end of the bougie, seized it with urethral forceps, and drew it down till it protruded from the stomach. He next pierced the upper end of the bougie, which protruded from the mouth, with an awl, and attached to it a strong double silk thread twice as long as the bougie. He now drew down the bougie through the œsophagus and stomach and pulled the thread after it. He then tied the upper end of the thread into the lower end of a large bougie, No. 10, drew this carefully down through the stricture, and left it in place for twenty-four hours. In order to make the treatment as little irritating as possible, Maydl took the precaution to draw the upper end of the bougie down into the œsophagus, after having attached a thread to it, which was secured to a pledget of gauze retained in the nose. He also secured the patient's hands, so that he could not pull the bougie out when it proved irritating. In twenty-four hours the bougie was withdrawn through the stomach and with it the thread was drawn down, and was then left in place for three days. At the end of this time a larger bougie was drawn down by means of the thread, and was left in place for twelve hours. The subsequent steps consisted in introducing a larger bougie every second day, diminishing the time which it was allowed to remain, and leaving the thread in during the in-

tervals. In order to reduce to a minimum the irritation of the manipulations, a small quantity of a five per cent. solution of cocaine was swallowed. Maydl found it best to introduce the thread through the nose, and not by the mouth, because it is less irritating in the former situation.

The obvious advantages of this ingenious method are, that when once the opening of the stricture is found, the way to it is never lost. This is sometimes no small matter, as it is common to find an enlargement of the œsophagus above the seat of a stricture, and a small bougie may easily miss the central channel. The retention of the bougie in the stricture is likely to have a similar effect to that of a *sonde à demeure* in the urethra, and to lead to a more speedy resolution of a stricture than could be hoped for from the repeated passage of such instruments.

The tediousness of the old method of dilatation need not be described here. It is more important to note that in a few days Maydl's patient reached a point where he was able for the first time in a year to eat a piece of meat in the natural way, and that the operator hoped in two weeks to be able to pass through the stricture the largest bougie. This success is encouraging, and on its face the method seems well adapted to the treatment of cicatricial strictures of the œsophagus. Of course, much is not to be expected from it in case of malignant strictures. — *Philadelphia Medical News*.

---

### Chloride of Sodium in Bright's Disease.

---

DR. ALLARD MEMMINGER, of Charleston, S. C., highly lauds this use of the drug in the *New York Medical Journal*, July 31st. He has tried it, so far, in only four cases, but his observations are of value, because it alone was used, to the exclusion of all other drugs. At first he orders ten-grain doses of the chloride, contained in gelatine capsules, three times a day, and if the state of the case allows, by preference one hour after or before meals. He generally reverses each day the order of giving; thus, if one day the capsules are given before meals, the next they are prescribed after. If the patient complains of no nausea, he allows him to go about, but at the slightest intimation of a sick stomach, he orders him immediately to assume the recumbent posture, and there remain for an hour or so, after which this temporary ill-feeling always subsides. The second day of treat-

ment he increases the dose to two capsules three times a day, and every other day he increases by one capsule until the patient is taking five capsules three times a day. About this time the good effects of the treatment will be apparent, not only from the improved subjective and objective symptoms of the patient, but from the improved condition of his urine. Albumen will, of course, at this period still be found in abundance—that is, if the case is at all a grave one; even here, however, if a gravimetric examination be instituted, a decided improvement, not so much in the absolute as in the relative decrease in albumen, is noted.

At this juncture he orders the chloride to be diminished in quantity, and he has so far found that after the system has thus been brought fully under its influence, it requires but two capsules, three times a day, to keep up the desired effect. If at this stage of the case there is any decided nausea or disinclination to take the medicine, he stops the treatment, and in the interval gives one or two alterative pills, after which he proceeds again to a resumption of the chloride. Should albumen again increase in the urine, urea and chlorides diminishing, he immediately resorts to large doses, thus bringing the patient once more under the influence of the chloride, after which it is again reduced.

The effects of this treatment are most marked. Head-ache, oedema, low spirits, general weakness and anæmia give way to just a reverse order of things, and the patient, who a few days before was most gloomy and desponding, is now full of life and hope.

Thus has it appeared to him in each of his four cases, and, if he has been led to express views that to many appear extreme, it is because his convictions are based upon clinical observations which, up to this time, he has never had the pleasure of recording with any other form of treatment. He would, therefore, urge a thorough trial of this therapeutical agent by the profession, on the following grounds:

1. It is harmless if properly administered.
2. Its effects are comparatively uniform, provided it is given for a sufficient time. That he has so far used it only in chronic cases of no long standing does not, in his opinion, militate against its beneficial effects; for, even should it not be found a cure for Bright's disease, may it not become an important article in our medical armamentarium—indeed, if only an ameliorator of man's sufferings and a prolonger of his life?

3. It may be employed as an adjunct to all recognized methods of treatment without detriment to the patient.

---

### The Assimilation of Iron.

---

MUCH difference of opinion has existed as to the method of action of ferruginous tonics. That their use is of advantage is a matter of daily observation, but many difficulties arise when we attempt to explain their mode of assimilation; for, apart from the fact that nearly, if not quite all the iron so ingested is recoverable in the feces, we are met with the equally perplexing fact that iron salts when introduced into the blood stream cause toxic symptoms analogous to those induced by arsenic.

It has long been recognized that the iron entering into our structure is not normally derived from any inorganic salt, but from one or more complex iron-containing compounds existing in our food, and to be found typically, of course, in milk. Bunge, in the *Zeitschrift für Physiologische Chemie* for 1885, records the extraction, from milk and from egg yolk, of this iron-containing organic compound, to which he gives the name of hæmatogen.

Hæmatogen markedly resembles hæmoglobin in molecular composition, though a still more close molecular resemblance may be traced between it and nuclein, if we ignore the absence of iron in the latter body. Bunge has extracted hæmatogen from the cereals and leguminosæ, and states very distinctly that our food "contains no inorganic iron combination, the iron present being in the form of complex organic compounds, which are built up by the vital activity of the plant; that in these forms the iron is absorbed and assimilated; and that from them the hæmoglobin originates."

Starting from these premises, Bunge's explanation of the value of inorganic iron salts in chlorosis is very interesting. The catarrhal state of the alimentary tract present in this condition favors a process of fermentation which induces the decomposition of hæmatogen. But when the inorganic iron salts are present, the sulphites evolved in decomposition attack such salts, with the result of sparing the hæmatogen. Confirmatory to this theory is the recent method of treatment of chlorosis, in which the disinfection of the digestive tract by the administration of small antiseptic doses of hydro-



chloric acid, after meals, has been found more efficient than the use of iron.

---

## Proceedings of the Suffolk District Medical Society.

---

### A CASE OF ULCERATIVE ENDOCARDITIS.

---

DR. F. C. SHATTUCK, upon being invited to open the discussion, expressed his interest in the well reported case which had just been read. The pathology of endocarditis in general presents problems at once interesting and difficult, to the solution of which we thought ourselves nearer some years ago than we do to-day. Until lately the real distinction between ulcerative and simple endocarditis was thought to lie in the presence in the former of micrococci, and the term diphtheric endocarditis was proposed to characterize the process at one time. To these organisms the infectious nature of the affection was attributed; to them it was thought to be due that emboli excited suppurative inflammation about their points of lodgment. This distinction now fails us since Klebs, Köster and others find micrococci in the products of any and every endocarditis, without having succeeded as yet in distinguishing between those accompanying forms which are clinically so different. Anatomically the difference is rather one of degree than of kind, and hence Osler prefers the term malignant to the term ulcerative. In an endocarditis of malignant course there may be no more ulceration than in a benign case of warty endocarditis; and, on the other hand, there may be well-marked ulceration from very different causes. The main anatomical distinction is in the different results of embolism; as to the pathological distinction we are at present ignorant; the clinical distinction is more clearly marked. Thus we are led to the eminently practical question of diagnosis. In some malignant cases the diagnosis may be made with tolerable certainty. We know that the process is especially liable to attack valves which are the seat of changes dependent on previous disease, notably sclerosed valves; and hence grave typhoid or pyæmic symptoms, for which no other cause can be assigned, in an individual known to be the subject of old valvular disease are, to say the least, suggestive. Similar symptoms with indications of embolic abscesses in a case of acute rheumatic endocarditis are, in

like manner, suspicious; but this association is, according to Osler, rare. In cases of primary malignant endocarditis the diagnosis may be reached by a happy guess, but is generally beyond our powers. The general symptoms vary very widely in different cases, simulating typhoid fever, pyæmia, malaria, or some other general infectious disease; the leading symptoms may be cerebro-spinal; symptoms pointing to the heart may be wanting or excessively obscure. If the heart was previously healthy, the organ is not enlarged and the course of the disease is usually too short to allow it to become so; while a *souffle* can easily be attributed to so-called dynamic causes. A case which recently occurred at the Massachusetts General Hospital, in the service of Dr. Abbott, the autopsy on which the speaker attended, well illustrates the impossibility of diagnosis at times. A woman died after an illness of ten days or so, with ill-defined, but rather typhoidal symptoms and no indication of cardiac disease. Primary ulcerative or malignant endocarditis limited to the tricuspid valve with emboli in the lungs was found. The speaker had seen two or three cases in life in which he had suspected this form of disease, but had not been so fortunate as to secure an autopsy to overturn or confirm the diagnosis. He congratulated Dr. Blodgett both on the diagnosis in the case just reported and on its verification.

Dr. E. G. Cutler expressed much interest in the case reported. He had never seen an instance of ulcerative endocarditis at autopsy, but had had, a few years ago, a patient under his care with the following history: A child of six had passed through an attack of mumps, under another physician; two other children were sick with the disease about the same time. Some days afterward the child, having been all the time ailing, was seized with chills, fever, pain in the *præcordia* and restlessness. There was found to be a loud systolic murmur at the apex. The patient got worse, the circulation in one of the arms suddenly ceased, accompanied by pain and swelling. The femoral artery in one of the legs became plugged soon after, associated with severe pain. The murmur ceased before death, which occurred about a week after the patient was first examined.

Dr. H. I. Bowditch stated that he had never seen a case of this disease in his life, and that the condition was unknown to him. The specimen was a most interesting one, and showed a new source of danger in diseases of the cardiac tissues. Dr. Bowditch asked if the diagnosis of ulcerative

endocarditis was made before death, and if so, on what grounds was this opinion based?

Dr. Blodgett replied that he had the privilege of examining the patient before death, and from the history of a long-continued organic disease of the heart which had been studied by careful physicians for many months, to which a new and most serious complication had been suddenly added, he was led to review the conditions to which this unexpected change might be due. The character of the symptoms observed at this time was essentially that of acute septicæmia; that is, there was acute pain in various parts of the body which were not before the seat of disease. The pulse and temperature were very high, the patient was in a condition of stupor, almost amounting to apathy, and resembled the state called "typhoid" in many asthenic diseases. The array of symptoms thus calling attention to a condition so closely approximating to that of surgical pyæmia, it seems only a short way to the diagnosis which alone would sufficiently explain the symptoms. The autopsy was of necessity very hastily made, and gave no time to examine the other visceral organs, which might possibly have shown other interesting pathological conditions connected with the state of the heart.

Dr. Shattuck said that in any case of endocarditis we may have embolic formations in the blood-vessels. In benign endocarditis the emboli do not occasion suppuration, while in the form of endocarditis which we may for the sake of comparison call "malignant," the emboli are followed by suppuration, and the appearance of a train of clinical phenomena bearing considerable resemblance to septicæmia.

Dr. Bennett F. Davenport spoke of the

#### PHYSICAL AND CHEMICAL QUALITIES OF ORDINARY COWS' MILK,

And added: The question of the age of the milk which is given to our city children I consider as of very much greater importance than it is usually deemed by physicians. There is no fluid that I know of which is a more rapid absorbent of foul odors of all kinds, or which offers a more fertile field for bacterial growths. Yet most of the milk, even when just delivered to the consumers in this city, is already in its third day of age, and has been exposed to a probability of contamination so great that I very much wonder that it does not become downright soured before the time of the next daily delivery. Very much of it is but

little short of this stage. I am firmly persuaded that it is to this changed condition in the milk, to which city folks have become so accustomed as to consider it the proper and natural condition, that a very large proportion of the summer diarrhœa and the resulting mortality among the children in our cities is due. If any one wants ocular proof of the grosser forms of contamination to which city milk is exposed, he has but to visit any of the larger milk depots of the city, and to look at the nature and the quantity of the foreign material left upon the cloth strainers connected with the centrifical machines used for separating the cream from the surplus milk of the day. If he does not then learn by seeing with his own eyes what he could otherwise hardly be brought to believe to be possible, I am very much mistaken as to what are the real facts. Very fortunate indeed would it be, if only the firm and already dissolved impurities could also be thus readily separated from the milk.

We, as physicians, have learned to know that milk about upon the point of changing will more disturb the digestion of a child than that which has already turned sour. I believe that the difference in the coagulation of breast and cow's milk in a child's stomach is more owing to the difference in the chemical reaction of these two milks, and in the amount of albuminoids contained therein, rather than to any difference in the nature of the albuminoids, for cow's milk, even when fresh, is of an acid reaction, while breast milk is neutral, or may be slightly alkaline. Then, too, cow's milk contains a much larger amount of albuminoids. Making cow's milk of a neutral or slightly alkaline reaction will render this curd finer and softer, and this is also accomplished by diluting with fluids or with soft solids, for which barley flour or malted extract serves well.

When it is desired to add cream to the diluted and sweetened milk when prepared for a child, I think it is better here in the city to use sweet cream raised by the centrifical machine, rather than that obtained by separation from standing, which necessitates it being just so much the older, when one of the chief troubles is that it is already too old. Such sweet cream is to be had of the large milk depots in the city.

I think that if physicians would instruct all their patients to demand that milk be delivered to them the same day that it is brought into the city from the country, this would become the more common custom of the trade, and that there would



be a marked decrease in the infant mortality during the summer months; for, if we can not secure proper cleanliness in the care of the milk, we might at least thus shorten materially the time during which fermentative contaminations would have a chance to work out their harmful changes.

Dr. George W. Galvin exhibited an

#### IMPROVED INHALER,

Which he described as follows: The inhaler is the invention of Dr. Geo. Evans, of Brooklyn, New York, and a full description of it, with a group of cases treated by him, was published in the *New York Medical Journal*, March 6, 1886. The great obstacle to overcome in the local treatment of pulmonary diseases is the condensation of the vaporized medicament in the mouth, pharynx and upper air passages. This has been overcome by Dr. Evans' instrument, which can reduce any fluid medicine or solution to so fine a degree that it can pass the bronchial tubes without condensing and reach the air cells of the lungs in which is stored the residual air. The changes in the lungs in pulmonary phthisis bring consolidation, tissue necrosis, putrefaction, decomposition and septic absorption (I am not now considering tubercle, its nature, etc., but what is considered pulmonary consumption); it is natural to suppose that if we can convey to the lung an antiseptic vapor which will reach the part undergoing the pathological changes, we should obtain practical result from the local treatment of pulmonary affections.

The apparatus consist of an air condenser, an air chamber (flask) for preserving a continuous current of air, a three-mouthed bottle, "Wolff's;" a spray chamber having three mouths; spray tubes; respiratory tube; mouthpiece.

A spray of the solution in the bottle is thrown (by means of compressed air), against the opposite wall with sufficient force to produce a thorough churning with the atmospheric air, a fine vapor, resembling cigar smoke, which escapes through one of the openings in the glass air chamber to the respiratory tube.

During inspiration through the mouthpiece, air enters the middle mouth of the bottle and displaces the vapor of which the bottle is full. During expiration the air in its turn is displaced, passing out of the middle mouth of the bottle, to make room for the vapor which passes from the glass air chamber to the bottle, where it accumulates for the next inhalation.

A vapor produced by means of this apparatus condenses slowly, fifty cubic inches of a vaporized solution, containing carbolic acid, borax, glycerine and water, requiring twenty minutes of a temperature of 60° F. to entirely condense.

Ten cases are now reported in this journal with a cessation of symptoms which leads the patients to consider themselves cured. One case of my own, far advanced in the second stage of chronic catarrhal pneumonia, after ten inhalations has gained in ten days two and one-half pounds, and to all intents and purposes is making a rapid recovery.

---

### Imminent Death in Acute Pneumonia Was Averted by Phlebotomy.

---

DR. JOHN B. ROBERTS gave a verbal report of a case. The patient was a man, æt. 55. After exposure to cold, pneumonia developed in the lower lobe of the left lung. One evening he was in great distress; respirations numbering 45 per minute; on percussion, dullness and flatness were found over both lungs; on auscultation, numerous coarse and some fine râles were heard on both sides; lips cyanosed; death imminent. Dry cups were used over the chest posteriorly, and phlebotomy to the extent of twelve ounces practiced. The respirations immediately fell to 35 per minute; the patient became comparatively comfortable; slept some during the night, and was much better the next morning. Convalescence went on uninterruptedly from that time.

Dr. Henry Hartshorne remarked upon the contrast between the now prevailing treatment of pneumonia and other acute inflammatory affections and that of forty years ago. Results do not show that the change has been to the advantage of medical practice. Formerly, even under hospital treatment, death from pneumonia was not frequent; in private practice it was rare.

Dr. L. P. Gebhard, near the end of half a century's large experience, said that he had never lost a case of uncomplicated pneumonia. Now we hear very different accounts. Men in the vigor of life not infrequently die of the disease after a few days of illness.

Dr. Hartshorne has reached the conviction that a radical mistake is prevalent in regard to the practical indications in

simple acute pneumonia. What have we therein as prominent pathological conditions?

1. Obstruction to the circulation at the seat of local inflammation.

2. Resulting general increase of vascular tension.

3. Arrest or considerable diminution of the secretions of the skin, kidneys and bowels.

In all these conditions there is no indication for alcohol, none for quinine, none for opium. The old-time remedy for the abnormal vascular tension of the first stage was the abstraction of a moderate amount of blood, according to the previous vigor of the patient, by venesection, cupping, or leeching. Having been brought up under this régime, Dr. Hartshorne can give personal testimony to its safety and frequent advantage. It is astonishing that in these days of daring surgery, of ovariectomy and laparotomy, for various occasions, physicians should be so much afraid of taking from a patient a few ounces of blood.

An adjuvant for such a measure of relief in the early stage of pneumonia, or substitute for it in doubtful cases, is the use of saline purgatives and diaphoretics. These also appear to be in recent practice very often, perhaps generally, neglected, Dr. Hartshorne believes, to a great disadvantage.

Frankly speaking, under the following plan of practice six out of ten cases of acute pneumonia in persons of previously good health, between twenty and fifty years of age, may be reasonably expected to die—viz.: treating them from the start with twenty grains of quinine daily, a table-spoonful of whisky every two or three hours, and a quarter of a grain of sulphate of morphia every six or eight hours. If any patients recover under such treatment, it is an escape probably due to the use of large hot poultices kept applied to the chest; an excellent application.

Another method of treatment Dr. Hartshorne has had ample experimental reason for believing will be followed by recovery in at least eight out of ten cases of simple acute pneumonia in persons not over sixty years of age, of previously good health—viz.: the abstraction on the first, second, or not later than the third day, of a few ounces of blood from the arm in the stronger patients, by cups or leeches in those of less previous vigor of system; about the same time, a decidedly purgative dose of some mild saline medicine; afterward, every two or three hours, a saline diaphoretic, citrate, acetate, or nitrate of potassium, or acetate of

ammonium; in the most violent cases, in patients of average constitution, tartar emetic during the first three, four or five days—not more than one-sixteenth to one-twelfth of a grain every three or four hours, not allowed to cause gastric distress; a warm poultice also being kept applied and renewed over the whole anterior part of the chest until the worst is over.

Should this practice be just now out of fashion, it may be very earnestly said that it is better to be old-fashioned than to lose a considerable number of patients dying of a malady like pneumonia, which *ought not to be mortal*.—*Med. Times*.

---

### Vaccination with Animal Lymph.

---

BASING his conclusions upon a large number of observations extending over a period of five years, and also deducing them from the experience of large institutions where vaccination is compulsory and carried on under the direction of the German Government, Dr. Riesel, in Halle, establishes the following as guiding principles in the vaccination with animal lymph (*Deutsch. Med. Zeit.*, July 19, 1886):

The Italian as well as the Dutch method have no advantages whatever; the best is Reissner's procedure, consisting in scraping off the ripe pustule with a sharp spoon under strong pressure, and while stretching the skin to the utmost so as to cause a state of anæmia of the latter at the time the lymph is thus obtained from the animal.

The dry lymph powder, while remaining in full strength for a very short time longer than the fluid lymph, has the disadvantage of forcing the operator always to prepare the lymph fresh each time he desires to vaccinate—a loss of time, especially of great moment in institutions where a large number of individuals have to be vaccinated.

Glycerine, whose property to protect animal tissues against decomposition is well known, has also proved amenable in the preservation of animal lymph, the various manners of employing it for this purpose being but of subordinate importance.

Additions of aseptic material to glycerine lymph are useless in small and hurtful in large quantities, for in the latter case they also destroy the activity of the virus, while in the first they do not protect.

Animal lymph must be employed in such a way that the



operation is performed with a lancet as dull as possible, and superficial, not bleeding, lengthwise scratches are produced by scraping rather than by cutting.

The local phenomena of inflammation which accompany the protecting vaccine pustule, due to animal lymph, frequently appear to the uninitiated as erysipelatous in character, though they are nothing of the kind.

The areola of the genuine vaccine pustule has nothing in common with erysipelas; the first runs a typical concentric course, the second not.

Erysipelas has a period of incubation of from 15 to 61 hours; the so-called early erysipelas is from 16 to 24 hours.

Against accidental infection of the vaccination wound or of the destroyed pustules, animal lymph offers as little protection as humanized lymph.

Cleanliness of the body, the clothing, and the residence of the person vaccinated, and also of the hands and the instruments of the operator, and of the room in which the vaccination is performed, are of the utmost importance, and serve as the only aseptic precautions which can be observed.

In first vaccinations the strict adherence to the rules just mentioned will always be attended with success.—*Med. and Surg. Reporter.*

---

### Ingluin.

---

A VERY learned name for a remedy is ingluvin. It is the essential principle of the gizzard, and bears the same relation to poultry that pepsin does to the higher animals. The honor of its discovery and utilization, in its crude state, remotely dates with the Chinese gastronomer, as well as to the Caucasian chemist, in its refined condition. From time immemorial the inhabitants of the Celestial Empire have used the gizzard of chickens and ducks in nearly all made dishes. Their writers have recommended the practice as a sovereign treatment of dyspepsia, weak stomach and vomiting. A favorite prescription of Chinese physicians for chronic indigestion is to cut up and digest chicken gizzards in hot water until they are reduced to a pulp, and then add some spices. A tablespoonful or two of the resulting paste is taken at each meal until the patient has entirely recovered. From China the practice passed to other parts of Asia, and was adopted here and there among the Mediterranean peo-

ples. Strange to say, it was never learned by the great nations of Europe until the latter part of the present century. On the other hand, the organic chemists of Europe discovered, about 1850, a powerful nitrogenous radical in the gizzard. Experiments thereafter showed it to possess many of the qualities of pepsin. These experiments led to its isolation. Numberless experiments have proven it to be a very valuable addition to therapeutics. Where pepsin refuses to act, and where in severe cases it has even been rejected by the stomach, ingluvin effected relief rapidly and with the greatest ease.

In four recent cases of poisoning by root beer (Brooklyn, June, 1886), Dr. George Everson, Jr., a well-known physician of that city, reports that after pepsin and all similar compounds had been rejected by the stomachs of his patients, ingluvin stayed the retching and enabled them to retain and digest food.

Dr. Lassing reports a similar experience in several cases of acute dyspepsia.

*A priori*, it would seem as if ingluvin should be more efficient and potent than pepsin in many cases of physical disorder.

Our poultry are chiefly granivores and have no beak nor other buccal apparatus for crushing the hard grain and seeds on which they so largely feed. The food is swallowed when apprehended and passes directly into the crop or gizzard. This seems to act both mechanically and chemically. Its interior walls are covered by a dense, hard, cutaneous membrane, surrounded by muscles of the most powerful type. Along with the food is always a small amount of sand and gravel. The organ acts apparently by bruising and cracking, rather than, as commonly believed, by trituration. The motion of the ingluvial muscles is accompanied by a slow but continuous exudation, from the walls of the crop, of a strong organic fluid, of which ingluvin is the chief constituent. The hull of the grain or the shell of the seed is broken by the pressure of the walls, and the gravel and their interior are exposed to the chemical action of the ingluvin. By the time it reaches the stomach it is ready for the gastric juices. From this point on, digestion proceeds as with the higher animals. As the gallinaceæ have very small salivary glands, and as the fluids secreted by these resemble the secretion of the parotid rather than that of the sublingual and submaxillary glands of the human being, it would seem as

if ingluvin played a double part, exercising the functions of the ptyalin of the saliva as well as the pepsin of the stomach. Ingluvin is prepared by the far-seeing chemists, Wm. R. Warner & Co., of Philadelphia. It is made from selected gizzards, and is so carefully extracted as to be free from all foreign organic bodies. It is already known and appreciated by the medical profession. The AMERICAN ANALYST bespeaks for it the same appreciation by its readers. We extract the following:

Prof. Roberts Bartholow, M. A., M. D., LL. D., in his late work on "Materia Medica and Therapeutics," says:—INGLUVIN. This is a preparation from the gizzard of the domestic chicken—*ventriculus callosus gallinaceus*. Dose, gr. v. —℥ j.

Ingluvin has the remarkable property of arresting certain kinds of vomiting—notably the *vomiting of pregnancy*. It is a stomachic tonic, and relieves *indigestion*, *flatulence* and *dyspepsia*.

The author's experience is confirmatory of the statements which have been put forth regarding the exceptional power of this agent to arrest the vomiting of pregnancy. It can be administered in inflammatory conditions of the mucous membrane, as it has no irritant effect. Under ordinary circumstances, and when the object of its administration is to promote the digestive function, it should be administered after meals. When the object is to arrest the vomiting of pregnancy, it should be given before meals.—*From the American Analyst, August 1, 1886.*

---

## Gleanings.

---

THE RADICAL CURE OF VARICOCELE.—To the large number of operations which have been devised for the cure of varicocele, yet another has been added by M. Richet, of the Hôtel Dieu. It is described in *Revue de Chirurgie* for April, by Mr. Picqué, who is disposed to laud it. The vas deferens is first separated from the bundle of veins to be obliterated and held out of the way by a thread of copper wire passed through the scrotum in an armed needle. The veins and the fold of scrotum over them are then grasped by the blades of forceps heated to a red heat, such as M. Richet uses for the destruction of hæmorrhoids. A wound of some

size is left, and cicatrization is obtained in about three weeks. M. Picqué argues that excision of the veins is the best of all the many operations for varicocele, but that it should only be undertaken by those who are quite familiar with the aseptic treatment of wounds. In cases where the surgeon is not confident of his ability to keep the wound aseptic, he recommends Richet's operation. We can not join in such advice. Richet's operation appears, from the description given of it, to be a very rude method of obtaining a result more easily, more quickly, and better obtained by other means.—*Lancet*, May 8, 1886.

A CASE OF CHRONIC CYSTITIS.—BY T. ROBENS, M. D.—In October last, a lady, fifty years of age, called at my office for advice. I found that she had been suffering from chronic cystitis for the past three years. At times her urine would pass involuntarily, accompanied by severe pains, soreness and scalding. Sometimes she would be able to retain it for half an hour, and occasionally an hour—never for a longer time. She had been troubled this way for over three years, in spite of the efforts of her family physician and other eminent medical practitioners to relieve her of the unpleasant symptom. She had become very emaciated, and much debilitated, and she had given up all hope of ever becoming any better. I prescribed: *R.* Ext. staphisagriæ fl., ʒ ij.; aquæ puræ, q. s. ʒiv. M. S. One teaspoonful at meals and on retiring.

One week from the date of her visit she communicated by letter the fact that she was entirely cured. I advised her to take the balance of the medicine, one dose a day on retiring, until it was gone. When I last heard from her she had not had any return of the disease.

ALCOHOL AND DISEASE.—Dr. Dawson Burns, the Honorary Secretary of the London Temperance Hospital, referring to the statement made to the Local Board of Winsford by the District Medical Officer that, in his opinion, three men who lately died from what seemed an attack of cholera, owed their deaths to the refusal to take alcoholic liquor, calls attention to the fact that the alcoholic treatment of cholera has confessedly proved a failure, and that recoveries have been far more numerous where it has been dispensed with. It is an admitted fact that the ordinary use of alcoholic drink, instead of being a preventive of that disease, rather predisposes to it. The superstitious value attached to alco-



hol in the treatment of disease is fast disappearing from enlightened medical circles; that the use of alcoholics in the great London hospitals is largely diminishing, with good results; and that the experience of the London Temperance Hospital, where alcohol has been given in only three out of three thousand in-patient cases, with an average annual mortality of five per cent. during twelve years, is exposing the fallacy under which the medical officer of Winsford appears still to suffer.—*British Med. Jour.*, Jan. 2, 1886.

CHANCROIDS. — According to the *College and Clinical Record*, Prof. Gross treats chancroids, seen within a few days of their appearance, as follows: Wipe out the sore and under the edges thoroughly with cotton, then apply with another bit of cotton carbolic acid, being careful to touch all the raw surface and to get well under the undermined edges. The pain caused by this application is but momentary, and is followed by a sensation of numbness, which prevents pain from further manipulations. Now, with a bit of cotton wrapped on a match, touch the ulcer with strong nitric acid. This will destroy whatever poison may be left. Protect with a bit of cotton. Have the patient bathe the penis in warm alkaline water three or four times per diem. If the prepuce covers the sore, let him use as a wash:—

R <sub>y</sub>	Cupri sulphate,	.	.	.	gr. ⅛.
	Acid. tannic,	.	.	.	gr. ij.
	Aquæ,	.	.	.	f℥j. M.

Place a piece of cotton cloth between the glans and prepuce. A bubo can be aborted by injecting into it an eight per cent. solution of carbolic acid, and the use of compression. If already formed, it may be treated as the original sore.

PERSISTENT CONSTIPATION.—In the *Lancet* (*London Medical Record*), Mr. J. Holm records a case of persistent constipation treated by medical gymnastics. A gentleman, aged twenty-four, came to the author complaining of most obstinate constipation, which had lasted for five years, in spite of various kinds of treatment. He attended daily for four months at the author's gymnasium. The first fourteen days passed without any action of the bowels.

On the fifteenth day a scanty relief was obtained by the help of an enema, and in a few days a stool was passed without the aid of an enema. The motions then occurred

naturally at intervals, first of ten, then of eight days. The intervals gradually diminished, and, at the end of the third month, the bowels were perfectly regular. Some months afterward the patient reported himself as being wonderfully well, the bowels acting like "clock-work." The various exercises used consisted chiefly in passive and active movements, with firm and deeply directed frictions and vibrations acting on the abdominal viscera.

FERRAN, who, a year ago, attained a world-wide distinction from his so-called preventive inoculation for cholera, has recently published an article on "Gout and Its Treatment," which is attracting considerable attention in the Spanish medical journals. The author calls attention to the injurious effect of the salts of soda upon those predisposed to gout. He observes that the disease is most frequent among the inhabitants of maritime cities, and is common among the passengers of vessels carrying salt. Alkaline waters also precipitate the attacks, which are followed by periods of alleviation. Whisky and other alcoholic liquors excite attacks, which appear to cure the patient, for the time being. For treatment he recommends the acetic extract of colchicum and inhalation of nitrite of amyl, which latter drug diminishes arterial tension and facilitates the elimination of uric acid. Nitrite of amyl is an excellent remedy in those cases which will not bear the nauseating and depressant action of colchicum.—*Revist. de Ciències Medicas*.

THE REMOVAL OF LOOSE CARTILAGES FROM JOINTS.—The *Northwestern Lancet* gives the following method of Dr. Sands, of New York, for the removal of loose cartilages: The cartilage is first transfixed with an awl. This he considers very important, and will not operate till this is done. The opening into the joint is made valve-like and the cartilage removed from the joint with a tenaculum. The operation was antiseptic and no drains were inserted; the deeper tissues were not stitched; catgut sutures were used to close the wound. Dressings: sublimate gauze, wood-wool and bandages of sublimate gauze. The leg was then placed on a straight posterior splint, firmly fixed in position by plaster bandages. The heavy dressing is used, because it is thought to keep the patient more quiet. If all goes well, the patient is kept in bed two weeks, and is then allowed to get up and go out.

THE TREATMENT OF RABIES WITH HOANG-NAN.—According to the *Gazette Médicale de Nantes*, twenty-four cases of rabies have been treated with hoang-nan by Dr. Barthelmy and several other medical men of that city or of the department. The first case so treated was in the month of March, 1882, the last in April, 1885. Ten times, at least, the bites, which were most frequently multiple, were situated on the hands, once on the hands and on the face. In the majority of cases cauterization was completely omitted, or practiced several hours or even several days after, with not very active agents, such as liquid ammonia, or a solution of carbolic acid. Two of the patients, who were closely observed by Dr. Barthelmy—viz., a man of thirty and a lad of sixteen—presented symptoms of rabic mania: persistent insomnia, anxiety, nocturnal agitation, the desire to run, hallucinations, barking, etc. However, none of these persons felt hydrophobia, nor have any of them, to this date, succumbed. The duration of this preventive treatment was, on an average, twelve days. The total dose of the powder of hoang-nan ingested during this time varied in adults from six to eight grammes. It was scarcely necessary to go beyond one gramme per day to obtain the physiological effects of the medicine—exaggeration of the reflexes, cramps, rigidity, slight trismus. The maximum dose was arrived at progressively, and in some cases the treatment was terminated by gradually decreasing doses. From the above cases the author deduces either that rabies is communicated much more rarely to the human species than is generally admitted, or that the hoang-nan, administered progressively to the physiological effects *during the period of incubation*, sufficiently and efficaciously modifies the nervous system and the entire economy to prevent the evolution of the rabic virus.

IODOFORM INJECTIONS IN KNEE-JOINT DISEASE.—The *Medical Herald* gives an account of the treatment of purulent synovitis by the injection of iodoform. A female of fifty-eight years had suffered for about a year with synovitis. The usual treatment did not control the disease. The joint was emptied, by the trocar and canula, of about a pint of thin flocculent pus; the joint was then washed out with a three per cent. solution of carbolic acid. The joint was injected with about two ounces of a ten per cent. iodoform-glycerine emulsion; the wound was dressed antiseptically.

The pain in the joint gave place to a slight burning. The operation was repeated once and a smaller amount of the emulsion used. Dr. Piltz thinks that this operation might be used to advantage in all cases where there is no bone complication. We doubt very much the advantage of this operation over the use of the carbolic acid (1 to 20), which is in use all the time. The carbolic acid changes the action of the synovial membrane, and probably does as much to cure the disease as the iodoform could do.

SAFETY OF COCAINE IN CATARACT EXTRACTIONS.—Dr. G. E. Frothingham presents, in the *Journal of the American Medical Association* for August 21, 1886, an account of thirty-nine cases of cataract extraction in which cocaine was employed, and deduces from his experience the following conclusions:

1. Cocaine relieves the operator from the embarrassments during the operation for cataract that arise from vomiting, also from the agitation of his patient which results from excessive bronchial secretion or stertorous breathing. These are often very troublesome when ether or chloroform is used.

2. The danger to the result which often arises from nausea and vomiting after the extraction, when other anæsthetics are employed, is very surely avoided when cocaine is selected as the anæsthetic agent and is properly used.

3. The danger arising from the depressing effect of cocaine upon the nutrition of the cornea is no greater than in cases where ether or chloroform is used. The depression of the circulation which often arises from either of them, may affect very injuriously the corneal nutrition.

4. The disturbance of the circulation of the interior of the eye, and consequent danger of panophthalmitis from this cause, is probably less in using cocaine for this operation than in resorting to general anæsthesia.

5. The danger of sepsis and consequent panophthalmitis from the use of cocaine may be avoided by using only fresh solutions.

THE PATHOLOGICAL HISTOLOGY OF COMPENSATORY HYPERTROPHY OF THE KIDNEYS.—Lorenz has made direct metric measurements of the histological elements of the kidneys in seven cases of experimentally induced compensatory renal hypertrophy, with the following results:

The hypertrophy consists chiefly in an increase of the cortical substance of the kidney, and, to a much less degree,



of that of the parenchyma. The cortical increase is caused in young animals by both hypertrophy and hyperplasia (numerical hypertrophy), while in older subjects the increase in size is due to simple hypertrophy of the elements.

The convoluted tubules were always enlarged, and the epithelium is thicker and wider than in normal subjects. The relatively slight increase in the size of the parenchyma is conditioned by enlargement of the lumina of the straight tubules without increase in the size of the lung epithelium. No hypertrophy of the connective tissue or capillaries was found.—*Centralbl. f. d. klin. Med.*

LANOLIN AS A BASIS FOR OINTMENTS.—In a preliminary note in the *Russkaia Meditsina*, No. 12, 1886, p. 207, quoted in the *London Medical Record*, Dr. L. K. Pavlovsky, of Kharkov, writes that his experiments with Liebreich's lanolin (first in Russia) enable him to arrive at the following conclusions: 1. Narcotic extracts, when combined with lanolin, are absorbed by the skin "quite satisfactorily," their pain-relieving action being obtained "with an almost perfect certainty." The dose used was only twice as large as that for internal use. 2. Hydrochlorate of quinine is absorbed also very easily. This statement is based on four cases of intermittent fever in children, where lanolin and quinine inunctions rapidly gave the effects desired. 3. When a lanolin ointment with iodide of potassium is rubbed in, iodine appears in the urine not sooner than two, four or six hours after inunction, while Lassar obtained iodine from the urine about three minutes after friction. 4. In children, lanolin is better absorbed than in adults. 5. Washing the skin with ether considerably facilitates the absorption of lanolin ointments. 6. In general, lanolin is a substance which promises to supersede all other constituents for ointments, and even in certain cases to render superfluous the internal use of drugs.—*Brit. Med. Journal.*

CAFFEINE AS A DIURETIC.—In Nos. 4 and 5 of the current volume of the *Review*, late and important results of the study of the physiology of the kidney were communicated. The result of von Schroeder's experimentation was that caffeine exercises a strong, energetic influence upon the renal secretion, and that this effect is due to a direct stimulation of the secretory elements, the epithelia of the kidney. Immanuel Munk coincides with this fully, as will be remem-

bered, and now comes further corroborative evidence in the *Central-blatt fuer die Medicinischen Wissenschaften*, July 17, 1886, from Dr. A. Langaard, of Berlin. He also studied diuresis by catching the secretion by means of glass-tubes inserted into the ureters. Chloral hydrate was given to effect paralysis of the vaso-motor center. The result is formulated to the sense that caffeine is a *true* diuretic; that the increase of urine secretion occurs, independent of the blood circulation, by direct action upon the secretory elements.

THE DOCTOR OF THE FUTURE.—The New York *Medical Times* (Homœopathic) in an editorial of true scientific spirit, says: "Go on in your sectarian course, ultra devotees of Hahnemann, if you will, be loyal to the teachings of your master if you must; but shut not your eyes to the fact that science has rendered obsolete many tenets of his system, and removed the last vestige of an excuse for maintaining an organization of physicians under an exclusive title, distinct and separate from the medical profession at large. That ultra school of medicine has fulfilled the complete measure of its usefulness as a separate organization. Loyalty to truth and progress now demands that it shall drop its narrow sectarian name, and no longer seek to keep its members in leading strings. In the nature of things there can be but one system of medicine recognized by science. Either homœopathy must absorb the old school or be absorbed by it."

MORPHINE SUBCUTANEOUSLY IN INFANTILE CONVULSIONS.—Dr. C. S. Scofield, of Boston, reports the case of a child eighteen months of age, previously healthy, whom he had been called to see on account of eclampsia. The child had been in convulsions for two hours and had been given emetics, hot baths, and mustard to the feet, without any benefit. The writer at once administered  $\frac{1}{8}$  grain of sulphate of morphine hypodermatically, which was repeated at the end of twenty minutes—no effect having been produced by the first dose. This was also followed by no improvement, and a third injection was administered twenty minutes later. This was effectual in controlling the convulsions, and by the expiration of an hour from the time of administration of the first dose the child was sleeping quietly. When seen the following morning the child had taken food as usual, and was apparently as well as ever.—*Medical Record*.

KOCH'S BACILLI IN ADDISON'S DISEASE.—Dr. Goldenblum, of Dorpat, gives in the *Vratch* (No. 11, 1886), an account of a case of Addison's disease occurring in a young man, in which the suprarenal capsules, which were cheesy, contained Koch's bacilli. The other organs of the body, including the lungs, which were emphysematous, were also examined, but no bacilli were found. The suprarenal capsules were immersed in alcohol and sections made, which were stained by Ehrlich's method. A previous case of Addison's disease in which Koch's bacilli were found in the suprarenal capsules was reported in the *Vratch* (No. 1, 1886), but in that case the diagnosis was somewhat less clear, the body not being distinctly bronzed, though a grayish discoloration was noted; there was also tuberculosis in the lung, which did not exist in Dr. Goldenblum's case.—*Lancet*.

TENDON-GRAFTING.—A boy, aged fourteen, cut himself in the hand and divided both flexor tendons of the middle finger. Thirteen months later he came under M. Peyrot's care. There was then complete inability to extend the last two joints of the finger. An operation was undertaken. It was impossible to approximate the divided ends of the tendons, so a piece of a young dog's tendon was interposed between them. Unfortunately the wound suppurated, but cicatrization took place and partial success was attained. The finger could be semi flexed, and was constantly held partly flexed, and therefore less exposed to injury than before; but the tendon was adherent to the scar. There seems to be no doubt that the engrafted tendon is really united to the boy's tendon.—*Lancet*, May 8, 1886.

ESSENCE OF TURPENTINE AS A STYPTIC.—Bodier states that he has frequently arrested serious epistaxis by the use of tampons dipped in essence of turpentine, introduced simply into the nostrils. The essence is partially vaporized by the body temperature, and in this state reaches the most inaccessible portions of the nasal cavities. He had also arrested, by the internal administration of the same agent, intestinal hemorrhages, and has found it of great service in checking bleeding from the gums. In his experience this drug is a more efficient styptic than the perchloride of iron.

HOW TO DETECT ACETONE IN URINE.—It is stated by Mons. P. Chautard that the presence of acetone in urine or pathological liquids may be readily detected by adding a

drop of an aqueous solution of magenta decolorized by sulphurous acid to the suspected liquid, when, if acetone is present, a violet color is produced, the intensity of which is proportional to the amount present. In dilute solutions the coloration does not appear until after four or five minutes; if the amount of acetone is very minute, the urine or other liquid may be distilled, the first portion that comes over being examined. In this way a very minute proportion of acetone may be detected.—*Lancet*, May 15, 1886.

SCARLET FEVER FROM THE COW.—The *British Medical Journal* publishes an account of scarlet fever directly traceable to diseased cows. An extreme outbreak of the disease appeared to be associated with the distribution of milk by a certain dealer. An investigation revealed that some of the cows had vesicles and small ulcers upon the udder and teats; the milk sold containing the milk of these affected cows was that which produced the mischief, as no ill results followed the use of any other milk sold by the same dealer. With a discontinuance of the sale of this milk, there was a cessation of the spread of the disease.

A REMEDY FOR WHOOPING COUGH.—Dr. Hammond places reliance on the following:

R	Ammon. bromid., . . . . .	5 i.
	Tr. lobelia, . . . . .	gtt. xx.
	Tr. stramonii, . . . . .	gtt. vi.
	Eucal. oil, . . . . .	gt. vi.
	Syrupi pruni virg., . . . . .	5 i.
	Elise cort., . . . . .	5 is.
	Aquæ, . . . . .	5 i.

M. Sig. Ten to twelve drops every four hours.

REMOVAL OF THE SPLEEN.—At the University of Genoa, Italy, in the surgical clinic, Prof. A. Ceci recently removed a spleen from a girl aged seventeen years. Thirty-one days after the operation the patient was reported in excellent condition, and a more recent note from Prof. Ceci states that the patient is in good health; pulse, 80; respiration, 22; weight increasing rapidly; complexion, florid. The extirpated spleen, with contained blood, weighed 77.16 ounces.

TEST FOR BILE IN URINE.—A writer in the *National Druggist* directs attention to chloroform as a test for bile in



the urine. It is ready, delicate and certain. All that is necessary is to agitate a few drops of it in a test-tube, along with the suspected urine. If bile be present, the chloroform becomes turbid, and acquires a yellowish hue, the depth of which is in proportion to the amount of bile present in the urine. If no bile be present, the test-fluid remains limpid.—*American Medical Druggist*.

FOR the treatment of leucorrhœa and 'fœtid vaginal discharges, *La Rev. des Mal. des Femmes* recommends the following:

R̄	Potassii Chloratis, . . . . .	3 iii.
	Tinct. Opii, . . . . .	3 iii.
	Aq. Picis Liq., . . . . .	5 viii.

M. Sig. Two or three teaspoonfuls to a quart of warm water, injected morning and evening. When there is pruritus vulvæ with the leucorrhœa, a solution of equal parts of tincture of iodine and iodide of potassium should be made, and a teaspoonful of this in one or two quarts of hot tar-water injected twice a day.

HEMORRHOIDS.—Duval gives, in the *Centralblatt fuer die gesammte Therapie*, the following formula for an application to hemorrhoids:

R̄	Unguenti camphorati, . . . . .	3i
	Pulveris gallarium . . . . .	grs. 15
	Plumbi acetatis, . . . . .	grs. 15
	Extracti belladonnæ, . . . . .	grs. 8

M. Sig. Rub on the hemorrhoids four times a day.

SYPHILITIC INSANITY.—Dr. Hurd, of the Pontiac Asylum, says in that variety of syphilitic insanity which affected the actor McCullough, anti-syphilitic treatment hastens the fatal results, because it interferes with the nutrition of the brain-cells, and does not retard the morbid processes going on within them.—*Am. Lancet*.

#### AYERS' COMPOUND SARSAPARILLA.

Fluid ext. sarzæ, . . . . .	3 ounces.
“ “ stillingia, . . . . .	3 “
“ “ yellow dock, . . . . .	2 “
“ “ May apple, . . . . .	2 “
Sugar, . . . . .	1 “
Potass iodide, . . . . .	90 grains.
Iron iodide, . . . . .	10 “

## Book Notices

---

A REFERENCE HANDBOOK OF THE MEDICAL SCIENCES. Embracing the entire range of Scientific and Practical Medicine and Allied Science by various writers. Vol. III., FAC to HYS. 813 pages. Illustrated by 6 chromo-lithographs and 718 fine wood engravings. Edited by Albert H. Buck, M.D. Supplied to subscribers only. Price, per vol., cloth, \$6.00; sheep, \$7.00; half morocco, \$8.00. New York: William Wood & Co. Cincinnati: Garfield.

We have received the third volume of this very splendid work. The promptness with which the volumes, so far, have been issued is certainly highly creditable to both the editor, Dr. Alfred H. Buck, and the publishers, Messrs. William Wood & Co., of New York.

For the benefit of new readers who have not seen our previous notices of the work, and for the purpose of reminding those who have, but have not had an opportunity of seeing the work itself, we will mention that eight volumes will constitute it when completed, averaging about 1,000 pages each. When we state that the pages are eleven inches in length and eight inches in width, and that the type is solid brevier, it will be perceived that the amount of the reading-matter to a volume is immense, and yet only six dollars is charged for a volume in cloth binding. The publishers could not afford to sell the work at so small a figure if they did not feel assured of a very large sale. The reading-matter of one of the volumes is double that of most medical works which sell for six dollars.

The work is essentially a medical and surgical encyclopedia, embracing in its contents, as stated upon the title-page, the entire range of scientific and practical medicine and allied science. In the way of illustration of the feature of its embracing among the topics discussed by it subjects collateral to medicine, we will mention that all of the principal mineral springs and health resorts throughout the world are described in it, and their relative merits set forth. The first article of the first volume is Aachen (Fr. Aix-la-Chapelle), renowned as a health resort in consequence of its springs. The article was written by Dr. Henry Fleischner, of Yale College, and gives a very full account of the waters,

the diseases they are useful in, etc. In the third volume, the one upon our table at the present time, among the H's, under the heading of *Habitations*, there is given a full description of dwelling-houses—the best methods of constructing them to subserve health and convenience. Beginning with the cellar, specific directions are given for building every part—describing the material to be employed, etc. To any one who is proposing to build a house, the discussion of the plumbing arrangement of this article alone is fully worth the price of the volume. But when it is considered that *Habitations* is but one of the collateral subjects to which the work is devoted, some conception may be formed of the great value of the eight volumes. In fact, the work may be considered as having embodied in itself the whole of the principles and practice of medicine, surgery, obstetrics, gynecology, hygiene, etc.—as forming a complete medical library.

Like as it is in encyclopedias, all the various subjects treated are arranged in alphabetical order, each one having been prepared by a writer known to be especially qualified to do so. The contributors to the third volume number almost one hundred, each one of them more or less noted for his knowledge of the subjects of which he treats.

The six chromo lithographs of the volume are very beautiful—the coloring being very fine; while the 718 wood engravings are exceedingly well executed.

---

A TREATISE ON ELECTROLYSIS AND ITS APPLICATION TO THERAPEUTICAL AND SURGICAL TREATMENT IN DISEASES. By Robert Amory, A.M., M.D. (Harvard), Fellow of the Mass. Medical Society, American Academy of Arts and Sciences, American Academy of Medicine, etc. 8vo. Pp. 307. Bound in Cloth. New York: William Wood & Co. Cincinnati: Garfield.

This work belongs to the series of the present year of "Wood's Library of Standard Medical Authors."

There have been quite a number of valuable works issued upon electricity, which are now before the profession; but that does not imply that there is not room for others. By multiplying books progress is made. The scientist reads attentively all the works upon a subject; and, then, enlightened by these, he proceeds to observe and investigate. In due time, close and hard study is rewarded by the develop-

ment of facts which had not been noticed by others in their researches, which, being published, aid in discovering still others.

Since electricity was first used in medicine no therapeutic agent has excited such a variety of opinions in regard to its value. Some have become so enthusiastic in its properties as a curative means that they have unhesitatingly pronounced it the chief of all remedies. Others, while not becoming so enthused, have still been disposed to accord it a high position. Others, again, have only been willing to regard it as useful in a limited number of nervous affections. And there are hundreds who declare that it has no permanent efficacy whatever in the treatment of disease.

But while electricity is undoubtedly not an agent that will alone cure all manner of diseases, yet that it possesses valuable therapeutic properties there can be no doubt. But to do good it must be employed in a scientific manner, not in a hap-hazard style. Very many know of no other way to use it than to place the patient's body, or a part of it, within the circuit of an interrupted current, and to keep it there for a half hour or longer, with occasional intermissions. If no benefit results, it is regarded as a failure of the remedy, instead of considering it the consequence of ignorance. We have met with not a few physicians with batteries who do not know what is meant by primary and secondary currents; and know still less about continued and interrupted currents.

The effects of electricity upon the vital forces are too manifest for any one to suppose that it possesses no influence in modifying morbid action. It is an agent of tremendous power; and if manipulated understandingly it can be made to do great good. But to understand its biological and physiological relations without first properly understanding the principles of chemistry and physics is not to be expected. Nor can the great truths be grasped which underlie its action upon living tissue, unless a comprehensive view be presented of the natural laws which affect the construction and destruction of living tissues.

The author, therefore, in order to qualify the student for understanding electricity as a therapeutic agent, has deemed it proper to begin the treatment of the subject with a statement of the principles of physics as applicable to electrolysis. Consequently much elementary matter is brought forward, which will enable the reader to follow more clearly the train of thought as presented by the writer.



The work is divided into thirteen chapters; and that our readers may better understand the efforts of the author to teach the principles of electrical action, so that the student may know how to employ it in the treatment of disease, we will give the title of a few of the chapters. Chapter I. is introductory, and is devoted to the consideration of physical laws, etc. Chapter II. treats of the physical relations of electrolysis. Chapter III. treats of the batteries for electrolysis, galvanic cells, etc. Chapter IV. is devoted to the consideration of the resistance and diffusion of the electrical current. Chapter V. considers the theory of destruction of living tissues by electrolysis. Chapter VI. treats of the methods of employing electrolysis in the living tissues. Chapter VII. begins the discussion or description of the application of electrolysis to the treatment of diseases. It will thus be perceived that half the work is devoted to making the student familiar with the laws governing the action of electricity, so that he may intelligently use it as a remedy. Chapter VIII. is devoted to the treatment of goitre by electricity, and in so doing the pathology, pathogenesis and natural retrogression of the affection are discussed at length. Chapter IX. is taken up in considering the treatment of exophthalmic goitre by electrolysis in detail, with illustrative cases.

The work will be regarded by the profession as a valuable addition to the literature upon electricity.

---

THE GENUINE WORKS OF HIPPOCRATES. Translated from the Greek, with a Preliminary Discourse and Annotations. By Francis Adams, LL.D., Surgeon. Volume II. Being Vol. VII. of Wood's Library for 1886. New York: William Wood & Co.

This work also belongs to the series for 1886 of Wood's Library of Standard Medical Authors. We noticed the first volume in the June issue of the MEDICAL NEWS.

As we stated in our notice of the first volume, every intelligent physician will be pleased to have in his library the genuine works of the great physician, Hippocrates, who has been venerated in all ages as the "Father of Medicine." He was born 460 years before the Christian Era.

This volume contains, along with a number of treatises, as on Fractures, Dislocations, Ulcers, Hemorrhoids, Fistulæ, etc., the celebrated Aphorisms of Hippocrates. Suidas,

who lived more than seventeen centuries after the time of Hippocrates, in speaking of these Aphorisms, pronounced them to be "a performance surpassing the genius of man." The translator states that they are a work which, from the time of Hippocrates down to within a very recent period, when ancient authority in medicine came to be unjustly discarded, was always looked upon as being one of the most important productions which have come down to us from antiquity. They have been translated into all the learned languages on earth: Hebrew, Arabic, Latin, English, Dutch, Italian, German and French languages.

Thanks are due to the Messrs. Wood & Co. for enabling the profession of this country to have in their libraries the works of this most eminent physician of antiquity.

---

#### DISEASES OF DIGESTION, URINARY AND GENERATIVE ORGANS.

Illustrated by one hundred and six fine wood engravings. Being Volume II. of the Handbook of Practical Medicine. By Dr. Hermann Eichhorst, Professor of Special Pathology and Therapeutics and Director of the University Medical Clinical in Zurich. This is Vol. VI. of Wood's Library for 1886. New York: William Wood & Co.

We noticed at considerable length the first volume of this work.

It will be remembered that the first volume was devoted to Diseases of the Circulatory and Respiratory Apparatus. This, the second volume, considers the Diseases of Digestion, Urinary and Generative Organs. The other volumes, which have not yet been issued, will, no doubt, be devoted to the consideration of the classes of diseases which have not yet been considered.

It is the purpose of the author to make the work a very practical one on the Practice of Medicine; and our examination of it, so far as its publication has advanced, leads us to believe that it is being carried out. There is no unnecessary verbiage in describing the various affections—the language being plain and to the point, recording all well-established principles and facts, and no space occupied with long-spun-out theories which are not edifying.

The style in which the work is issued makes it highly convenient for the use of students. Each volume containing but about 350 pages, in which is embraced the complete

discussion of two or more classes of disease, peculiarly fits it for easy reference and to be employed as a text-book. The division into small volumes comparatively, that is, not so large as to be at all cumbersome, permits it to be portable, so that it can easily be carried to the lecture-room.

---

## Editorial.

---

ON THE VALUE OF BRÜCKE'S METHOD FOR THE REMOVAL OF INTERFERING SUBSTANCES FROM URINE IN TESTING FOR GLUCOSE.—This is the title of a paper, reprinted from the *American Chemical Journal*, by Edgar Moore Green, Esq., of Easton, Pa., son of Traill Green, M.D., LL.D., Professor in Lafayette College.

In determining the presence of glucose in diabetic urine by any of the copper tests, it is found that, under circumstances as stated by Mr. Green, some of the normal constituents of urine, such as creatinine and uric acid, interfere with the reaction of these tests. In the ordinary course of a case of diabetes, when the urine contains an abundance of glucose, usually no difficulty is experienced in obtaining the reactions; but after a patient has been restricted to a diet of nitrogenous food alone, great difficulty is often found in making the tests, because of a diminution in the amount of glucose and an increase in the amount of the interfering substances—creatinine, uric acid, etc. It may, therefore, be necessary to remove these substances before testing for the glucose. The method for their removal suggested by Brücke, and in use many years, consisted in adding neutral plumbic acetate to the urine, and immediately afterward adding plumbic tribasic acetate. The precipitate was then separated by filtration and washed with distilled water. The filtrate and washings having been collected in one vessel, ammonium hydroxide was added, which threw down the glucose in combination with the lead in the form of lead saccharate. This white precipitate was collected on a filter paper, washed, and then suspended in distilled water, and hydrogen sulphide, which decomposed the compound, passed through it. The filtered solution contained the glucose; and it was used for the tests, after the hydrogen sulphide had been driven off by evaporation.

The original paper by Brücke, Mr. Green states, could not be obtained, as it was not to be found in the journal referred to by Neubauer and Vogel. Mr. Beale, however, gives the same method as the preceding. According to Bruce Jones, the seventh of a grain of glucose may be detected when diluted with upward of six ounces of water, and two-thirds of the total quantity of glucose present in a solution can be separated by this process.

Mr. Green determined that he would, by a series of experiments, ascertain the amount of glucose recovered after the use of this process, for he had never heard of any accurate experiments made to verify these statements. He details, therefore, in his paper a number of experiments by himself, for the estimation of the amount of glucose by this process, and for the purpose of determining the practical value of it. "For it is readily seen," he says, "that if a large percentage of the glucose is lost in the procedure, when but a relatively small amount had been present, that which remains may not be sufficient to give the proper reactions. Hence it might be thought that no glucose is present, when it has really been present in the original urine."

In making the experiments he used normal urine, recently passed, in which there was no glucose. To given quantities were added definite amounts of pure crystallized glucose.

We would like very much to recount the various methods employed in the quite lengthy and complicated chemical experiments devised by Mr. Green for verification of the interesting question, but we have not the space. It must suffice to say that by the different methods almost all possible conditions of working the original process were obtained, and it was possible to ascertain not only the whole amount of loss caused by the process, but also the steps which involved a loss, and the amount of each.

In two solutions, in which 1.0 per cent. of glucose had been dissolved, the loss occasioned by neutral plumbic acetate was 8.09 per cent., and that occasioned by plumbic tribasic acetate was 6.85 per cent., making the total loss up to this part of the process 14.94 per cent. From one of these solutions the lead was removed by hydrogen sulphide, and the total loss of glucose was 49.98 per cent.

The loss caused by neutral plumbic acetate in two solutions, containing 2.0 per cent. of glucose, was 8.30 per cent., and that caused by plumbic tribasic acetate was 8.28 per



cent., the sum of the losses being 16.58 per cent. By testing the filtrate obtained after precipitation by ammonium hydroxide, a loss was found in one case of 57.82 per cent.

Mr. Green concludes his interesting paper with the statement that the losses are not uniform, but very variable in different solutions. And in the experiments this variation was found to exist, even though the solutions were subjected to exactly the same conditions, and even when the corresponding precipitates, in each case, were washed the same number of times and with equal volumes of water. Hence, from any amount of glucose found after employing the process, it could not be determined how much had originally been present in the urine.

"The process certainly removes the interfering substances from the urine; but even for qualitative work, if no reaction for glucose could be obtained after making use of the process, it would be by no means certain that no glucose had been originally present in the urine."

---

CELLAR BUILDING—In the second volume of the *Reference Handbook*, recently published by Wm. Wood & Co., is an article upon "Habitations," which contains very considerable valuable information in respect to the building of residences. As physicians occasionally build houses for themselves, and are often consulted by their patrons, who are proposing to build, as regards sanitary matters relating to new residences, we have thought it would probably be interesting to many if we copied from the article some advice which the author gives in regard to the construction of cellars. There is certainly no part of a house, regarded from a hygienic view, of more importance than the cellar. A badly made cellar may render the finest house ever built too unhealthy to live in.

The best stone for a cellar wall, says the author, Mr. J. Pickering Putnam, Architect, of Boston, is granite, which is nearly impervious to water, and some slates and limestones are almost as water-proof. Where sandstones, soft limestone or brick are used, it is very desirable to coat the outside of the cellar wall, from the bottom of the trenches to the surface of the ground, with coal-tar melted and put on with a brush. If the ground is springy, a strip of tarred roofing-felt a little wider than the wall should be laid upon the footings just below the cellar floor, and the stone-work

continued upon it. This will prevent moisture from rising in the walls by capillary attraction from below, and with the coal-tar coat on the outside, a cellar with walls of porous material may be made dry and wholesome at small expense. Damp courses of tarred felt, asphalt, sheet-lead or vitrified clay are often laid in the basement walls of brick or stone houses just beneath the sidewalk line. In this situation they prevent moisture from rising from the ground into the superstructure and staining or saltpetering the walls, but do nothing to keep the cellar dry, while the felt beneath the cellar floor, with tar on the outside, accomplishes both these objects.

Mr. Putnam states that the foundations of houses in the country are almost always built "dry," without mortar, and only "pointed" inside with the smallest possible quantity of mortar daubed over the crevices between the stones. The back of the wall, he says, bristles with projecting points of stone, which lead water into the cellar, while the movements of the earth outside in freezing and thawing, engaging with these projections, dislocate the stone-work, soon throwing off the pointing and opening the way for the entrance of air and water from the exterior. As distinguished from this, the best, although a more expensive, mode of cellar building is to lay the walls throughout in mortar made either with cement and sand alone, or with the addition of a cask of lime to each cask of cement, which in some places cheapens the mortar considerably without much injuring the quality. The exterior excavation should be made about eight inches wider all around than the outside of the cellar wall, so that the stone-work, while building, shall stand clear of the bank. The exterior face of the wall should be made as smooth as the inside, by selecting the stones, and the outside of the mortar joints should be well pointed and smoothed with the trowel, which the extra room in the excavation allows of doing. After this extra space is filled in with gravel, at the completion of the walls, the writer states, rain-water running down the sides of the house, or soakage from the bank, will follow the smooth surface to the bottom without finding any crevice through which it can reach the interior, and will, if in small quantity and in a porous soil, be dispersed into the ground below the cellar bottom. If the soil is clayey or springy, the dispersion may take place so slowly that the water may rise in the trench, and either saturate the walls or force itself by

hydrostatic pressure through them. When this is to be feared, the wall must be drained at the bottom. If the probable accumulation of water is small, it is sufficient, for a wooden building, to dig the trenches for the cellar walls two feet deeper than the cellar floor, and to lay the walls with dry stone for eighteen inches above the bottom of the trench. This will provide a reservoir under the walls, in which the water accumulating during a heavy rain may be retained below the cellar floor until it has had time to soak away into the ground. If however, the soil is naturally springy, this under-drain must be supplemented by a trench or pipe drain, not communicating with a sewer, but leading from the bottom of the trench to some place where the water can flow freely away. With heavy buildings of brick or stone, there is some danger, in soft ground, that settlements may be caused by allowing water to run freely just beneath the wall, and it is better in such cases to use open-jointed pipe, placed just outside the footings of the wall, instead of the dry-stone drain beneath it.

---

MEDICAL EDUCATION ABROAD.—Just previous to the opening of the medical colleges in England, the publishers of the *Lancet* devote one of its weekly issues exclusively to college affairs for the benefit of students, and entitle it "The Students' Number." Its issue of the 11th inst. constitutes its "Students' Number" for the present year. In an article in it, it reviews the educational requirements to enter as a student of medicine and to graduate, which exist, at present, in the various countries of Europe. As the information is reliable, and as we know that very many American physicians hold erroneous notions as regards the requirements for graduation enforced in many foreign countries, we will make use of some of the information contained in it for the benefit of our subscribers. As regards education qualifications previous to entering upon the study of medicine it says:

"In every continental country of importance, for the course for the full license to practice a knowledge of Greek is compulsory, and generally a much more extensive knowledge of Latin, Mathematics and Science than is requisite with us, even for some of the examinations belonging to a grade above the lowest. In France, for example, where the possession of the Bachelor of Lettres and the Bachelor of

Science (slightly modified) is compulsory on all students who desire the full privilege of practice, the requirements of the double degree may fairly be reckoned as decidedly higher than those of the London matriculation, and as covering more ground than the minimum examinations for Arts degrees at Oxford or Cambridge, though probably the stringency of the tests in the English universities is greater than in France, where nearly everything is *viva voce*. A preliminary education about equal to that indicated by an ordinary English university degree in arts is required also in Germany, Russia, Holland, Austria, Norway, Sweden, Denmark and Switzerland. . . . The minimum period of medical study varies considerably in different countries: being four years in France and Spain; four and a half in Germany; five in Austria, Russia, Belgium and Portugal; six in Italy, Holland and Denmark; seven in Norway; and ten in Sweden."

Licensing systems vary in different countries. A State examination, other than a university degree, is enforced on all in Germany, Greece, Holland and Switzerland. A university degree is compulsory in Austria, Denmark and Italy, and, for the full right to practice, in France.

The *Lancet* states that in Norway, Portugal, Russia, Spain and Sweden, the universities and other medical schools grant licenses which constitute titles to practice. In these countries, it says, a further examination is required for the Doctorate, which, in some cases, as in Norway and Russia, is of so difficult a character that few practitioners attempt it unless they aspire to professorships or important public appointments. The only country where a partial or restricted qualification is now granted is France, where the license as *officier de santé* only gives the right to practice in the department in which it is conferred, and does not authorize the holder to perform serious surgical operations, except in the presence of a doctor. It, however, requires four years of medical study, or the same period as is necessary for the higher qualifications; but the preliminary requirements are very much smaller, and the examinations are not so numerous nor so stringent.

The German State examination is a very thorough and practical test, or rather series of tests, of the candidate's acquaintance with all branches of medical knowledge. It consists of two main examinations: The "Physicum" takes place after two years' medical study, and is conducted orally



and publicly. The subjects are Anatomy, Physiology, Chemistry, Physics, Botany and Zoölogy. The final examination is conducted by a commission, and before admission to it the candidate must have passed at least four years and a half in professional study, two years of which must have been subsequent to passing the "Physicum" examination. He must have held appointments in the surgical, medical, obstetrical and ophthalmic departments, and must have completed two labors in the presence of one of his teachers. The examination embraces Anatomy, Pathological Anatomy and General Pathology, Surgery and Ophthalmology, Medicine, Midwifery and Diseases of Women and Hygiene. In Anatomy he has to dissect and put up a microscopic preparation; in Pathology he must make a partial necropsy; in Surgery, Medicine, Ophthalmology and Midwifery, cases have not only to be examined in presence of the examiner and reported on, but have to be taken charge of for several days under the examiner and full reports handed in daily. A labor has to be attended in the examiner's presence, and, in addition, the candidate is subjected to ordinary *viva voce* tests, and has to perform certain operations on the dead body and on the obstetric phantom. The anatomical and physiological portion must be passed before admission to the other subjects. If the student fail in one of the latter, he may still present himself for the rest, and he may be re-examined in his "weak" subject in from six weeks' to six months' time, according to the degree of weakness.

---

FUNERAL OF JAMES G. WAKLEY.—The funeral of this gentleman, the late editor of the *Lancet*, of London, took place on the 4th of the present month at the Cemetery of Chobham Parish Church. Dr. Wakley has been intimately associated with the *Lancet* for the past quarter of a century.

The *Lancet* states that the funeral was numerously attended by relatives, by representatives of his editorial staff, by members of the medical profession, and by friends and sympathizers. In the last rites paid this gentleman there will be observed the high respect and the deep, sincere and extended affection among all classes which attach themselves to the high-minded, conscientious Christian physician. We learn that when the funeral *cortege* left the house, with the coffin covered with floral wreaths and designs, followed by a long line of carriages, it was observed that all the shops and

cottages along the route to the cemetery manifested tokens of mourning, even the public houses being closed. The churchyard was full of country people of all ages, from the parishes in its vicinity. There were old men and women, it is said, maidens and children, poor enough for the most part, but not too poor to have provided themselves with something in the shape of mourning for the friend and neighbor they had lost. And this affection thus shown by these poor people was not for one of themselves—for one holding the same position as themselves—but was for a man whose associations were with the most eminent men of science and learning, and who was at the head of one of the leading medical journals of the world, if not the leading one.

The Rev. T. Stirling Coles, assisted by a number of eminent clergymen, officiated during the religious ceremonies. Among the physicians and surgeons who are mentioned as being present at the final obsequies, we notice numerous names of the most eminent medical men of England. After the completion of the religious services at the chapel, the *Lancet* says, "the body was borne to the cemetery hard by. The attendance at the grave was very large, made up, for the most part, of the villagers, among whom Dr. Wakley had spent so many years of his life, and to whom he had evidently endeared himself by his numerous acts of unostentatious benevolence and charity. After the sublime sentences of that service with which it is the lot of few indeed not to be acquainted, a hymn was sung, in which all present joined. We feel sure that it was just as our friend would have desired. To die among those we love, to be buried amidst scenes that were once so familiar, and to be followed to the grave by the poor, the aged, and the village children, about the sincerity of whose regret there could be no suspicion—what could be better?" It seems to us that every one in attendance upon the funeral must have felt that there was a touching sublimity in the whole proceedings. Somewhat similar was the funeral of Dr. Wm. H. Mussey, of Cincinnati, during which the church was largely filled with poor people, among whom we observed not a few colored persons.

The Rev. T. S. Coles, taking his text from Isaiah, chap. xxx., verse 18, after mentioning a number of acts of the deceased as a medical man, said: "His ear was attent, and he had a hand 'open as day for melting charity.' His liberality, great at all times, was markedly so at Christmas, in the munificent distribution of gifts amongst all his poorer neigh-

bors. If tears are the distillation of the heart, these will flow plentifully from many eyes in the freshness of his memory. Yet he had a higher aim, the spiritual benefit of the surrounding poor, and of others at a distance. For this end he might be found frequently in the abodes of indigence and suffering, with an open Bible and on bended knees. . . . He revered Holy Scripture, and he carefully excluded from the columns of his journal whatever appeared to militate against its authority and inspiration. He became an anxious inquirer after truth. He knew he was attacked by a fatal disease, and as the shadows of the evening of his days lengthened, his active mind became strengthened upon the realities of the eternal world. . . . His faith was simple, his humility conspicuous; his patience and resignation to the will of God were enduring, and his thoughtfulness for others unmistakable. A threefold element of his character may be summed up in an apostle's words: 'Not slothful in business, fervent in spirit, serving the Lord.'

---

DR. OLIVER WENDELL HOLMES IN ENGLAND. — The *Lancet*, of London, thus speaks of Dr. Holmes' recent visit to England:

"Dr. Holmes has unfortunately left us long before we have had such opportunities as we could have wished of expressing our welcome to him. At the last moment, as the guest of the Liverpool Philomathic Society, he spoke kindly words of affection and respect for 'dear, dear England,' which will be felt and appreciated everywhere. But, though gone, he is still with us as one of our most 'autocratic' companions, teaching us great, broad lessons of sympathy with all that is human and divine. His medical distinction may be somewhat lost in his literary fame, but we claim him, nevertheless, as one of the men whose vision has been refined and intensified by the study of medicine, and who could not have drawn some of his most effective pictures of character and experience without this study. Who but a medical man could have done justice to 'the little gentleman' with his diminutive and deformed body and his disproportionate thoughts? or who else could so eloquently have vindicated the true gentleness and kindness that underlie the apparent sternness and want of feeling of the surgeon? We trust he has received a fresh stock of health, and that in the atmosphere and association of the old

country, which he loves like a true American, he has found a source of fresh inspiration, the expression of which will delight the 'breakfast-table' for generations yet to come."

---

THE HIPPOCRATIC OATH.—We present here to our readers this celebrated *Oath*, which we copy from the "Genuine Works of Hippocrates," very recently published by Wm. Wood & Co., of New York:

"I swear by Apollo the physician, and Esculapius, and Health, and All-heal, and all the gods and goddesses, that, according to my ability and judgment, I will keep this Oath and this stipulation—to reckon him who taught me this art equally dear to me as my parents, to share my substance with him and relieve his necessities if required; to look upon his offspring in the same footing as my own brothers, and to teach them this art, if they shall wish to learn it, without fee or stipulation; and that by precept and lecture, and every other mode of instruction, I will impart a knowledge of the art to my own sons, and those of my teachers, and to disciples bound by a stipulation and oath according to the law of medicine, but to none others. I will follow that system of regimen which, according to my ability and judgment, I consider for the benefit of my patients, and abstain from whatever is deleterious and mischievous. I will give no deadly medicine to any one if asked, nor suggest any such counsel; and, in like manner, I will not give to a woman a pessary to produce abortion. With purity and holiness I will pass my life and practice my art. I will not cut persons laboring under stone, but will leave this to be done by men who are practitioners of this work. Into whatever houses I enter, I will go into them for the benefit of the sick, and will abstain from every voluntary act of mischief and corruption; and, further, from the seduction of males and females, of freemen and slaves. Whatever, in connection with my professional practice or not in connection with it, I see or hear, in the life of men, which ought not to be spoken of abroad, I will not divulge, as reckoning that all such should be kept secret. While I continue to keep this Oath unviolated, may it be granted to me to enjoy life and the practice of the art, respected by all men in all times! but should I trespass this Oath, may the reverse be my lot!"

The translator remarks that Hippocrates was superior to



his age in humanity, for that even Aristotle treats very gravely of the practice of abortion, and does not at all object to it if performed before quickening. Juvenal speaks of abortion as being very common at his time.

---

**THE AMERICAN ACADEMY OF MEDICINE.**—This organization will hold its next meeting at Pittsburgh, Pa., October 12th. This will be the first time, we believe, that the Academy has met west of the Alleghenies.

The Academy has now about three hundred members. The large majority reside in the East. We are pleased, however, to learn that the number joining, of those living west of the mountains, is rapidly increasing. As our readers are aware, among the requirements of fellowship are holding the degrees of A. M. and M. D. There are very many physicians in the West, and we are astonished that not more of them do not unite with the society; for fellowship is a guarantee of high qualifications.

Quite a number of papers are expected to be read, and the meeting promises to be an unusually interesting one.

---

**A PATIENT** of Pasteur's, bitten in the hand by a dog on the 21st of April, and treated in Paris from the 4th to the 13th of May, died July 21st of rabies. An autopsy was made and the medulla sent to Pasteur. A rabbit and a dog were inoculated from this and both died. Pasteur states that this is the first time that his treatment has been unsuccessful in a patient bitten on the hand.

---

**DR. M. CHARRIN**, of Paris, has discovered that cataract may be produced in rabbits by the internal administration of naphthaline. The disease has thus been induced in five rabbits, by the daily administration of from nine to twelve minims of the drug, to each pound of the animal. These doses are fifteen times greater than the ordinary dose for man.

---

**A MAGNIFICENT GRATUITY.**—A gratuity of £10,000 has been granted from the Bavarian Civil List to the widow of Professor Guden, of Munich, who perished with the late King of Bavaria in the lake at Castleberg. He left a family of eleven children.

# THE CINCINNATI MEDICAL NEWS.

VOL. XIX. No. 226. }  
Old Series.

OCTOBER, 1886.

{ VOL. XV. No. 10.  
New Series.

## Original Contributions.

### The Iodide Treatment of Syphilis in all of its Stages.

BY D. N. MOORE, M. D.,  
Attending Physician to the St. Mary Hospital, Decatur, Ill.

#### *Editor* CINCINNATI MEDICAL NEWS:

IN your August number I find an article by Dr. Edmond Souchon, Professor of Anatomy and of Clinical Surgery, Tulane University of Louisiana, "On Some Unusual and Beneficial Effects of Iodide of Potassium in Secondary Syphilis."

He says: "We all know the remarkable effects of iodide of potassium in the tertiary period of syphilis, and also its action on the muscular pains of the incipient stage of the disease; but it is seldom that we see as remarkable an action as the following in the second stage:

"Mr. R. S., aged twenty-five, with a fine stout constitution, contracted syphilis, the primary symptoms of which presented nothing unusual. Upon reaching the middle of the third month of the disease, his whole body became covered with a marked flat papular eruption; some of the papules being as large and as thick as silver five-cent pieces, others of a dime and a nickel. The proto-iodide of mercury, which he had been taking in moderate doses, was increased so as to have a decided effect upon the gums and to produce slight salivation; and at the same time he was taking cinchonia and iron, but it was all without any result. The papules continued enlarging and then they ulcerated, some of them becoming as large as a silver quarter."

"Feeling very much for the patient, I could think of nothing else but to try iodide of potassium in gradually increased doses. I barely expected very much from this treatment, as it was at so early a stage of the disease. The patient had taken thirty grains a day for only a short time, when, to my very great astonishment and delight, the ulcerating process was stopped, and the sores assumed a healthy color; at the same time his general health was being much improved. The treatment was continued, and at the end of four weeks all the ulcerated papules were healed and never returned."

He goes on and relates a second case, and then says: "These two cases show how important it is to give iodide of potassium in the earliest stage of the disease if the case does not progress satisfactorily. In fact, I very often give the mixed treatment from the very moment my diagnosis is positively made."

I would here beg leave to ask why it is necessary to give mercury at all if we have to resort to the use of the iodide to cure the case in any or all of its stages?

For thirty years and more I have been unable to understand why it is that the profession continue in the belief that syphilis can not be treated successfully without the use of mercury in any or all of its forms, unless it is from habit; and that our authors on the subject follow in the wake of the preceding ones.

Having seen the unsatisfactory results by the mercurial treatment, and in many cases the total failure to cure the patient after years of persistent treatment, I resolved to abandon it and rely upon the iodide treatment. In March, 1854, I was called to see Mr. C., aged forty, who had been suffering from the disease some five years, and had been under the treatment of quite a number of the most noted physicians and surgeons of the West almost continuously. At this time he appeared to be very near his end, and was suffering the most intense agony day and night. His face was covered with thick crusted scabs; his hair had nearly all fallen out; over the region of the deltoid muscles were deep ulcers two or three inches in diameter; on his back, over the dorsal region, was one large enough and almost deep enough to take in a coffee-cup. His legs were covered with nodes, some of them broken down and running. He was unable to walk or stand, or even sit up.

Without further preliminaries, I will proceed to recount

the treatment I adopted and carried out. My prescription was as follows: iodide of potassium, three grains, three times a day, largely diluted, after eating; wine of colchicum, thirty drops three times a day before eating, with sulphate of morphine, one-third of a grain, at bedtime every night. In a few days I discontinued the colchicum and morphine, as the muscular pains had subsided, and added to the iodide solution half a grain of iodide to the dose. For the ulcers I used the black wash only.

In sixty days this patient was on the streets able to travel. He went to St. Louis, Mo., and at his hotel met with his old friend, as he said, and placed himself again under his treatment, which was the proto-iodide of mercury in pills, and the corrosive chloride of mercury in solution. He continued this treatment for five months, and, at the end of that time, was ready again to take his bed, when I was again called to treat him, beginning where I had left off, with the very satisfactory result that in thirty days he was out attending to business, and he continued in good health for twenty-five years after. The solution he continued to take at long intervals for some four or five years, when he was satisfied that he had no further need of it.

Among the large number of cases of syphilis that I have treated during the last thirty-two years, I will only briefly mention a couple in addition to the one I have alluded to. These, previous to coming under my charge, had been treated according to the mercurial plan after the most approved manner laid down by the latest authors.

Mr. M., aged thirty-three, whom I first met in 1862, had been an officer in the army. His statement to me was that he had contracted syphilis while in California about five years before. He had been treated by surgeons in the army, and by some of the best civil surgeons, as he thought, until he was now so disabled that he had resigned his position in the army. He desired me to take charge of his case, as we had been acquainted for many years. He knew and stated to me about what his treatment had been up to this time, namely, the mercurial.

I placed him upon the following prescription:

R Potass. Iodid., . . . . .	℥ vi
Sol. Iodini Comp., . . . . .	℥ ss
Aquæ Destill., . . . . .	℥ ixss.

M.—Sig. Take one teaspoonful three times a day after eating, in water.



With the use of this medicine, without other treatment, he recovered and continues in good health.

Now as regards the third and last case:

Mrs. G., aged thirty, had been in the hospital for six months suffering with the tertiary form of syphilis, and had been pronounced incurable by the attending physician, who was a competent practitioner. He had treated her during the time mentioned after the usual manner. When called in consultation I found her condition very bad indeed. She was reduced to a skeleton; she was so offensive, so loathsome, that no one could stay in the ward with her; in a word, she was the most horrible-looking object that I have ever seen. In fact, she was a mass of corruption, such as no pen can describe. I took but a hasty glance at her, stating to her at the time that I would do all that I could for her. In consultation with the hospital physician I intimated that I thought it was possible for her to recover. He thought the idea preposterous, and especially when I suggested my treatment; but said, as the prescription was so simple, and the treatment so easily carried out, that he would see that it was done. The prescription was about the same as I have detailed; namely, the iodide of potassium in solution, and not to exceed fifteen grains a day. The result was a complete recovery. She regained her wonted health, presenting all the appearance of a vigorous, hearty woman. She afterward married, not by my advice however, and had children.

My hope is, in writing this communication, to induce medical men to stop and think before they pursue any further the old, stereotyped treatment. For, after more than thirty-three years of active practice, my mind is thoroughly convinced that the mercurial treatment is not the treatment for syphilis in any stage; but that the iodide treatment is the treatment in every stage; but it should be given in the proper quantity, and at the proper time, as well as in the proper manner. Because a three-grain dose does well, is that a good reason why we should increase it to ten, twenty, thirty and sixty grains, which is frequently done?—many works upon syphilis thus recommending its employment.

Dr. Pepper states in his edition of 1886, that "Mercury and potassium iodide are indispensable in the treatment of syphilis, but that the former is the more valuable." He, too, recommends that potassium iodide, when made use of, be given in large and increased doses, ten to twenty

grains three times a day, and in obstinate cases much larger doses.

Because the twentieth of a grain of arsenic answers a good purpose for a patient, is that a good reason why we should give two grains? If the twentieth of a grain of strychnia acts well, is that a sufficient reason why we should give two or three grains at a dose? Arsenic is a poison; so is strychnia; so is potassium iodide. Arsenic in an overdose will kill; so will strychnia; and so will the iodide of potassium. Unfortunately, there are too many who appear to be unable to distinguish the difference between the effects of the medicine given and the disease that it is intended to cure.

In my judgment the iodide of potassium is the remedy for syphilis, provided it is given in proper doses. And what is the proper dose? From nine to fifteen grains in twenty-four hours as a rule, no more—(I have never seen a case that I thought required any more)—and continued for several months, or until all traces of the disease are gone. And further, in my experience in the treatment of the disease, the cases previously treated with mercury have been more tardy in recovering. In all of the cases that I have treated, I have not used one grain of mercury.

We all admit, I believe, that syphilis is the result of a specific poison. If such is the case, then the iodide of potassium is the remedy, not only in the tertiary form, but in the secondary and in the primary. Theoretically, I believe that proposition to be true; and practically, I have, in my judgment, proven it to be true.

"What!" said a surgeon to me one day when we met in a Military Hospital during the late war, "do you presume to undertake to treat primary syphilis successfully without the use of mercury?" "Yes, sir," said I, "I do more than that; for I not only presume to undertake to treat primary syphilis successfully without the use of mercury, but I do treat it successfully without the use of mercury—have done so for several years, and expect to continue to do so—and by such treatment I do not expect to see the tertiary form of the disease in the patient so treated, and have not seen it. And if I have treated a case of it that did not recover, I am not aware of the fact."

It was not my intention or desire, even if I had possessed the ability to do so, to attempt to write an exhaustive article at this time, nor do I intend to enter into or invite a

controversy with any one on this subject. But if I succeed in calling the attention of any of the profession to this matter sufficiently to induce them to throw aside all prejudice and give it a thorough trial, as I think I have done, I shall have accomplished all I could have desired.

---

## Remarks on the Preventive Treatment of Fevers.

---

BY R. W. SEAY, M.D., PILCHER'S POINT.

---

Read before the Louisiana State Medical Society.

DUNGLISON says: "A person has an attack of fever when he is affected with rigors, followed by increased heat of skin, quick pulse, languor and lassitude. We find much interest in the analysis of these symptoms, and the basis of our treatment depends upon our knowledge of the causes of the symptoms."

Prof. Ziemssen says: "During the chill the temperature of the peripheral portions of the body is lowered from  $9^{\circ}$  to  $12.50^{\circ}$ , and even more, owing to the contraction of the smaller arteries, the scanty blood supply thus caused and the consequent diminished tissue metamorphosis."

"The doctrine that the elevation of the body temperature and the increase of heat supply in the body is due to the diminished loss of heat during the cold stage may be looked upon as exploded, for the temperature is high before the subjective feeling of chill and the peripheral cooling of the body occur; and even where the temperature does not determine the question of an increased process of oxidation and a greater production of heat, we conclude this to be the case from the increased excretion of urea, which often exists for some time before the fever. The production of heat rises until the maximum of temperature has been reached, as is shown by the thermometer, and which usually happens at the end of the cold stage; then it begins to sink gradually, but not at the rate indicated by the thermometer, insomuch as the giving off of heat and the consequent cooling of the body is increased during the hot stage and the stage of sweating, and therefore a record of temperature is given, which corresponds as little to the quantity of heat produced as does the record given during the cold stage, when on the contrary, the excessive contraction of the

smaller vessels and anæmia of peripheral parts diminish the giving off of caloric."

There is the belief in the existence of a special center presiding over the regulation of animal heat.

The cooling of the surface of the body which takes place during the stage of chill depends to a great degree on the peripheral arterial cramp or contraction, whereby the pressure upon the internal organs is increased, even sometimes causing rupture of the spleen or heart, as well as capillary hæmorrhages in other organs.

During the hot stage the cramp of the vessels is relaxed, and the previous small and hard pulse becomes fuller; its frequency is always increased, in febrile intermittents, without the rise and fall in its frequency corresponding to the rise and fall of temperature. In the *Journal of American Medical Association*, for November, 1885, Dr. N. S. Davis says:

"We are told by various authors that the heat of the fever is due to the increased combustion of tissue or to diminished liberation of heat or to both together; either of which theoretically we might suppose would cause accumulation of heat and account for the pyrexia."

"While we have; however, more heat evolved from tissue changed in feverish individuals than would be evolved in a healthy person subsisting upon same diet, no more tissue change takes place and no more heat is evolved than would have occurred in a healthy man living on a liberal diet. We know also that there is in fever great prostration, great loss of strength and of energy; not because of so great an increase in combustion or retrogressive change in the tissues as on account of a cessation of assimilation and repair." It is evident, then, that unless some other factor were present besides the production of heat, we would not find the bodily temperature raised above the normal. In health heat is eliminated and accumulation prevented by exhalations of moisture from the skin and lungs."

One hypothetical explanation of fever was given by Dr. W. M. Ord, in a recent address before the Medical Society of London.

He asks the question, "Is the increment of heat of body in fever due not only to combustion or other disintegrative process thereto allied, but also to the persistence in the form of heat of energy which should have taken another form?" Throughout the body we recognize two processes going on



—the building up of tissues on the one hand, their disintegration on the other. The disintegration of tissue is clearly attended by the liberation of heat. This upbuilding presents itself to me as necessarily attended by the consumption or disappearance of heat, which assumes some other form, kinetic [motary] or potential.

Dr. Ord noticed in fruit the two processes, viz.: the stage of growth, when formative processes predominate and result in the production of cellulose, starch, etc., and the stage of ripening, when destructive or retrogressive changes predominate and cause the formation of sugar. Dr. Ord used fruit, the growing and ripening cucumber, for his experiments. The fruit grows mostly at its ends. If a uniform difference of temperature could be found between the air and the cucumber throughout its length, he argued that it would be due to evaporation simply; but if varying at different points along its length, he argued it would be due to vital processes taking place in it. He conducted his experiments by taking with the same delicate thermometer the temperature of the air about the plant, the temperature of water standing beside it, and by thrusting the thermometer into the fruit, its temperature at different points in its length. By these experiments he found that the growing fruit was cooler in all its parts than the ripening or cut fruit, and that it is coolest where growth is fastest, namely, at its ends.

Dr. Ord said: "I believe that in the production of fever heat there is a first factor of increased oxidation or combustion or disintegration setting free heat." The further increment he believes to be furnished by heat going astray in default of correlative change in metabolism [or transformation].

Dr. Broadbent has formulated the problem, thus: "If a theory of the febrile process is to be formed, it must be based upon the theory of the relation between the nervous system and the processes of nutrition and oxidation, especially the latter."

Dr. Ord suggests that:

"In all fever, slight or intense, there is superadded to the combustion which we recognize an influence of the nervous system, atrophic influence, arresting processes in which heat should be transformed; and that the increasing temperature is determined by the increase of this inhibitory influence."

"In the treatment of the hyperpyrexia, I know of nothing

so trustworthy as the bath, cool, cold or graduated, 'and he prefers the latter.'"

In recapitulation of the causes of heat of fever we will say there are: 1st, arterial contraction; 2d, accelerated action of heart; 3d, increased tissue metamorphosis or oxidation; 4th, probably excitement of a nervous center which presides over the production of animal heat; 5th, probably a nervous influence causing an inhibitory action on the usual changes in metabolism or transformation. Now I hold that if we can give remedies which will undoubtedly prevent the first three of the known causes mentioned, and oftentimes also the last two theoretical causes, we can lessen or entirely prevent the occurrence of fever, and that furthermore, by the use of these remedies, with proper care, prevent the excessive hyperpyrexias which usually occur in many diseases.

We use these remedies in the pyrexia, and we can more profitably use them in the prophylactic treatment of fevers.

To what remedies do you more particularly allude? you may desire to ask.

My answer is those remedies which prevent, 1st, arterial contraction; 2d, increased action of heart; 3d, accumulation of blood in the internal organs and hence increased tissue metamorphosis or oxidation, and 4th, blunt the sensibility of the nervous system, preventing irritation of the nervous center presiding over the regulation of animal heat, if there be such a center, or preventing the inhibitory influence in the usual transformation, and hence not allowing the accumulation of fever heat. Now we have these remedies in *veratrum viride* and *aconite*. *Veratrum viride* acts upon the intra-cardiac-ganglia and the muscular substance, as is proved by paralyzing the pneumogastric with atropia, and it still affects these parts. *Aconite* we are told acts in the same way. Now by proper use of these, I suggest we can have the preventive effect mentioned above, yet I do not mean that we shall not use quinine and allied remedies, but that the medicines I have suggested shall be an aid to the usual preventive treatment.

I name for instance the following mode:

R <sub>y</sub> .	Tr. <i>veratrum viridi</i> (Norwoods), . . .	gtt. iv.
	Tr. <i>aconitiæ</i> , . . . . .	gtt. v.
	Spts. aet. <i>nitrosi</i> , . . . . .	ʒi.
	Aquæ, . . . . .	ʒj.

M. Signa. Begin eight hours before the expected return of fever, and give every three hours until skin is acting freely and the pulse reduced to 60 or 70 per minute. I will state that in my practice I have repeatedly tried the plan as suggested, and that it was successful in every case, yet it requires more careful watching than is necessary in ordinary cases, for the administration in this manner by inexperienced persons might produce too much of a depressing effect.

In conclusion, I shall be glad if you let the "mantle of charity" fall upon your criticism in case your opinion do not coincide with mine, yet I desire still more that my remarks should tend to aid in benefiting those intrusted to our care, and I invite your discussion and, if necessary, criticism upon this subject.

My remarks in this paper refer more to malarial intermittent fevers than to any other, but it may be beneficial in many kinds.

---

## Selections.

---

### Chicago Medical Society.

---

Stated Meeting, August 16, 1886; E. J. Doering, President, in the Chair.

#### OFFICIAL REPORT.

DR. F. E. WAXHAM presented a

#### MEMBRANOUS CAST OF THE TRACHEA AND LARYNX.

The specimen presented was removed from a child nine years' old. This cast had remained in the larynx and trachea for several months. The patient was brought to me from Minnesota by Dr. McDavitt, of Winona. The history is as follows: The child claims that in April she swallowed a hedge thorn, while away from home. She was at once taken with suffocation, and twenty-four hours afterward was operated upon, when at the point of death, by Dr. McDavitt, who performed tracheotomy. The child was unable to breathe through the natural passages after the introduction of the tracheotomy tube, although many attempts were made to remove it. It seemed impossible for the child to get breath through the natural passages, when she was brought to me. Upon laryngoscopic examination the larynx

seemed to be closed, but digital examination revealed a very small opening into the larynx. In this opening a small sound was passed, and this was followed by one of the smallest-sized intubation tubes, this by a larger one, and finally the largest-sized tube was introduced. It could not be passed on account of the tracheotomy tube, and violent vomiting ensuing, the tube and this cast were ejected. After the rejection of this membrane a large-sized tube was introduced and pressed down into position, as the tracheotomy tube was removed, which gave the child perfect comfort. She remained comfortable after the introduction of the tube, took several glasses of milk during the afternoon, and in the evening was taken to the train and returned to Minnesota, the intubation tube remaining in the larynx to be removed by the doctor in the course of a few days.

Dr. John B. Hamilton, of Washington, D. C., read a paper on

#### THE RADICAL CURE OF INGUINAL HERNIA,

In which he said that the ablest surgeons, from the earliest times to our day, have given much attention to this subject. Dr. Baxter's tables show that of 334,321 recruits and substitutes examined by the recruiting officers during the War of the Rebellion, more than 17,000 were rejected on account of hernia. The London Truss Society, during the first twenty-eight years of its existence, issued over 83,000 trusses. Two factories in Philadelphia manufacture and sell from 216,000 to 250,000 per annum. Celsus was the first surgeon to have definite ideas about the operation for the cure of hernia; he used cauterization and a bandage. Ligature of the sac has been practiced from an early day. Maupas performed gastrorraphy. Lisfranc, in 1296, favored castration. Ambrose Pare was the first to absolutely abandon castration; he used astringents. Freytag was the first to practice dilatation of the rings in strangulated hernia. Nicholas le Quin, of Paris, introduced the truss about the year 1660, but it was not until the middle of the eighteenth century that surgeons began to cut off the gangrenous portion of intestine in cases of strangulated hernia. The galvano-cautery was proposed by Dr. John C. Minor, of New York. Galaud, in 1878, favored the elastic ligature. The practice of scarification is a very ancient one, and has been brought down to recent date with excellent results. Guerin was probably the first to practice subcutaneous scarification. In-



vagination has for its object the occlusion of the inguinal ring by the fascia, and sometimes by the integuments. The late Dr. George Allen, of Springfield, Ill., reported fifty cases cured by Gerdy's method. Wood's method not only invaginates the fascia, but draws together the pillars. All of these methods have their greatest success in small hernias and bubonocoeles, and are absolutely valueless in those which are so large that ordinary invagination will not occlude the opening. Dr. Alexander stated, in 1883, that he had performed the radical cure thirty times without any deaths. Wood reported 339 cases without special antiseptic precautions; 96 were cured, 7 died, 59 failed; in the remainder the result could not be ascertained. Accidents may follow Wood's operation as well as others, such as sloughing, peritonitis and tetanus. From official reports on file in the Marine Hospital Bureau at Washington, it appears that in Calcutta, India, in 1884, out of a total number of deaths from all causes of 1,293, nearly nine per cent. were due to tetanus. Dr. Hamilton favored an operation in all cases affording a reasonable prospect of cure, and thought all cases of bubonocoele should be operated upon.

Dr. D. W. Graham said: I think I express the sentiments of every member present when I say that it is probably not possible to find in the English language as complete and satisfactory a review of the history of the various operations for the radical cure of hernia as Dr. Hamilton has given us in this paper. Certainly it has been gratifying and instructive to us all to listen to it. Some of the figures which the Doctor quotes give us an idea of the great prevalence of hernia. I believe reliable statistics show that on an average about every fifteenth or sixteenth individual, in civilized communities, suffers from some form of it. When we remember this great prevalence, and when we remember that every subject of a hernia sustains thereby a certain amount of disability, and that very many are entirely disabled by it, the subject of the radical cure of hernia assumes an importance not always accorded to it. I think the author of the paper takes a highly colored view of the future of these operations. It is not probable that this generation, at least, will be able to use the expressions he thinks surgeons will be using some day in Chicago. However, this degree of success is to be looked forward to, and attained if possible. In regard to the modern methods of operating, I understand the distinctive features of Wood's method to

be that it is almost entirely subcutaneous, that he uses wire, and that he allows the sac to remain in the canal as a kind of plug. So far as I know, this method is not practiced in this part of the country to any extent. In Mr. Wood's hands it seems to be successful in permanently curing a considerable majority of those operated upon, and in decidedly benefiting a good many who are not permanently cured. His statistics show that there is almost no danger to life from the operation itself, at least in his hands. Any method which will give such results, and at the same time involves so little risk to life, must be a good operation.

The open method, the one chiefly practiced in this country, according to my observation, contemplates strict attention to antiseptic details and the avoidance of suppuration. It involves a little more risk to life from the operation *per se*, but to compensate for this it would seem to give, theoretically any way, a larger percentage of permanent and complete cures. The modifications or varieties consist chiefly in dealing with the sac. Although MacCormac claims that unless the rings are wide there is no advantage in attempting to close them, it seems to me the best way to treat the sac is to excise a section of the neck between two ligatures, pushing the stump into the abdominal cavity and allowing the body of the sac to remain, unless it is small and loosely adherent, when it may be extirpated. After any of these operations there remains the funnel-like depression on the inner surface of the abdominal wall, which favors a recurrence of the hernia, however efficiently we may have obliterated the sac and closed the rings. MacEwen, of Glasgow, in a recent article, describes and advocates a plan he has devised for obliterating the depression. He utilizes the sac by dissecting it from its surrounding attachments, putting a suture through it from side to side, beginning at the lower end, thus making a corrugated pad, which he pushes through the internal ring into the cavity, after first separating the peritoneum for a little distance around the ring with the finger. This makes a convexity on the inner surface of the abdominal wall, where there would otherwise be a concavity. This modification appears to be a real improvement, but the practical value of it is as yet largely conjectural. By way of adding something from a historical standpoint, I might mention, what I think was not alluded to in the paper, that electrolysis has been used and advised to set up a plastic inflammation in the inguinal tract.

I believe this suggestion comes from a Cleveland surgeon, whose name I have forgotten. This is the same in principle, of course, as the use of subcutaneous injections, and I should think would be preferable to the injections, if I were to judge of it without having tried it.

Dr. Moses Gunn said: This subject is of intense interest, and we are very much indebted to Dr. Hamilton for the exhaustive review he has given us. We have to consider what are the best methods for operating with the intent of effecting a radical cure. I am inclined to discard all the old invaginating processes. In the first place the invaginated portions are always liable to subsequent prolapse; in the next place, it is always a foul mess. It won't do to simply remove the cuticle; all the organs of the skin must be destroyed. The skin contains the hair, sweat and sebaceous follicles, and unless they are destroyed, they will continue their work, and thus accumulate material for decomposition. In order to make a success, you are obliged to do more than to destroy the cuticle. You will have to destroy the skin, and that is a very slow process and exceedingly nasty. Therefore I am inclined to repudiate all invaginating processes. I repudiate, also, all of the subcutaneous processes, for they are blind procedures, and I would not adopt them where an open operation could be as well, and even more advantageously and safely, resorted to. I believe the best and surest method of trying to effect a radical cure of hernia is the open method. This method should be performed in every case where an operation is made for the relief of a strangulated inguinal hernia. Just as soon as the operator has opened the neck of the sac and restored the prolapsed viscera or viscus, he should close up the wound. He should begin at the topmost portion of the sac, and with a curved needle and catgut take it up and ligate as near to the internal ring as he can. Then he should drop down about half an inch lower and ligate again, and so on down through the canal. He should then approximate the pillars at and above the external ring as closely as possible and close the outside tissues. Thus the operation which is made for the relief of the accident should be made an operation for radical cure. It can be done more effectually at that time than at any other.

Then again, the physician is called upon to make an operation for a radical cure; the patient comes to him complaining of the truss, which has become ineffectual, the hernia

escaping in spite of it, and his life becoming a misery to him, and he asks if something can not be done to make a radical cure. The answer is "yes," but the question is, by what method shall we make it? I say by an open operation, practiced with all antiseptic precautions. Cut down upon the parts, separate and dissect out as well as you can the neck of the sac, the hernia having been reduced; ligate the sac and cut out a portion. Thrust the stump back into the canal and approximate the pillars, closing them tightly and keeping the external ring tightly closed. So much for the method; now for the prospect of success. How much right have we to expect what might justly be called a radical cure? By the term radical I mean permanent. In what proportion of cases can we expect to have a permanent cure, so that the patient will never have hernia again? What is hernia and who have it? I think I can safely say that the typical man never has hernia. When the true type in development has been attained and the abdominal walls closely woven together, they are proof against such accidents, and there will be no hernia. Hernia is the result of the imperfect development of the abdominal muscles and aponeuroses. When that imperfect anatomical development obtains in the patient, the abdominal muscles are thin and flabby, and in such cases we get hernia. Nor can we in such a case by an operation make a man better than his Creator made him; but if we can make him as good as he was, we may congratulate ourselves. After we have operated and closed up this weak point as well as possible, the very best result that we can expect is that we have made the man as good as he was before he had hernia: but if he was weak enough to have hernia from certain exciting causes, he will be weak enough to have it under similar circumstances again. If his hernia is brought on by lifting and straining, the same exciting cause will bring it on again, and under these circumstances a radical cure is only measurably radical. We should tell the patient after operation that if he will be more careful and take no violent exercise, he may hope for exemption from hernia.

In other cases, the patient has an old and immense hernia and can not wear a truss; we operate upon him and can say to him that if he will be more careful and wear a truss, he can be tolerably comfortable for the rest of his life. Such, I apprehend, is the true aim and scope of operations for the radical cure of hernia; such are the precautions we



should give our patients, as they must become our co-operators in order to make this operation a success; and with such co-operation and conscientious efforts on our part, radical cure of hernia becomes a standard and important operation, as important as the subject itself, which, as we have seen, is of immense importance on account of the great dissemination of the disease.

Dr. E. F. Wells said: Dr. Hamilton has certainly read a very interesting and extensive paper. There is one point in particular mentioned by the author, namely, that he advocates an operation in all suitable cases where an operation is not distinctly indicated. Every practitioner of large experience must certainly have met with many cases in which the truss has been applied, resulting in a cure, and I think the truss should not be stricken entirely from the radical cure of hernia.

Dr. Hamilton in closing the discussion, said: I need not say that I am extremely gratified to find such substantial unanimity of sentiment as to the propriety of operation—nay, as to the necessity of operation, but there can be no doubt as to the necessity of further statistics on the subject. In regard to invagination, I think a reading of the paper will not show that I advocated the method of invagination recommended by Gerdy. In the recent open method there is no invagination. Under the original Wood's method, the sub-cutaneous fascia only was pushed up under the ring; by the open method we cut down directly on the sac. This open method is really a combination method, because it brings together the pillars and takes care of the sac. Statistics are necessarily unreliable as to the ultimate permanency of the cure of these cases. The best statistics are those shown by the Swedish Hospital, where, out of 300 cases, a large percentage of recoveries is shown, and if statistics are worth anything in determining the success of a method, we must place some reliance on these. It would be well to have patients come back every year for the purpose of re-examination.

Dr. Fenger, if I correctly understood him, speaks of the influence of suppuration in curing these wounds by letting them heal from the bottom, but in various subcutaneous operations that is exactly what it is intended to avoid. There is no doubt that suppuration will make a radical cure of hernia if the patient's strength lasts and the suppuration does not extend into the abdominal fascia. That was the

method by which the old red-hot irons accomplished their purpose. The mineral acids produced a radical cure by the destruction of the tissue and healing from the bottom. The seton also performed a cure, but it has so many disadvantages that it is not to be compared with those procedures that stop the inflammatory processes short of the decomposition or death of the exudate. In regard to operating on children, I think the argument can not be regarded as sound that we should not operate on them on account of the difficulty of keeping a bandage on, for surely, if any cases are to be benefited by an operation for a radical cure, they are those in which the patient is young enough to grow—in which the tissues can be brought together and retained with great hope of a permanent cure. Everybody knows that cases do recover by the use of the truss, but the proportion, I believe, is less than by any other method. As stated by Professor Gunn, it is found that a majority of operations for strangulated hernia are, in effect, really operations for the radical cure, and there are more than five cures from operations to one after application of the truss. And when we remember that there are 250,000 trusses manufactured per annum in Philadelphia alone, I doubt very much if it can be shown that trusses have even a fair percentage of recoveries following their use.

---

### The Pathology of Puerperal Albuminuria.

BY ROBERT MAGUIRE, M. D., LOND., M.R.C.P.,

Physician to Out-Patients, and Joint Lecturer on Pathology, St. Mary's Hospital.

THE cases of puerperal albuminuria complicated with retinitis are of great importance, as presenting a feature which links the affection, in one of its forms, more closely to albuminuria, the result of organic kidney mischief; and I should be glad if the ophthalmologists could tell us whether the occurrence of retinitis in puerperal cases has any influence on the prognosis of the albuminuria. The common form of puerperal albuminuria is characterized by the fact that in the later stages of pregnancy a large quantity of albumen appears in the urine, which, after delivery, disappears in a marvelously short space of time, and the patient then resumes her usual health. Such is a common course. But

sometimes the termination is more serious: uræmia in its various forms may appear during the pregnancy and labor, or after delivery the albumen may still continue to appear in the urine, and the case may lapse into one of chronic Bright's disease. It is evident, then, that in the more serious form we have to do with an organic kidney lesion. This lesion was for a long time considered to be a venous hyperæmia from pressure; but, as a matter of fact, this has seldom been found, and, moreover, the urine of these cases is not in all respects the same as that met with in venous hyperæmia. A lesion more commonly found is the very opposite to this—that is, anæmia of the kidney, with fatty degeneration, believed to be due to reflex spasm of the renal arteries, although obviously for this view there is no sufficient basis. But knowing that such a lesion is found, let us consider the more favorable cases, and inquire, how can it be that an extensive fatty degeneration of the kidney, and, what is more, a *chronic* fatty degeneration should clear up in so short a time after delivery and leave no trace behind? *A priori* this seems hardly possible. Such a consideration, too, brings into one's mind those cases of functional or cyclic albuminuria which are now occupying so largely the attention of physicians, and one can not help asking whether also, in the less grave form of puerperal albuminuria we have to deal with a merely functional derangement. In this connection I may be permitted to refer to some observations upon which I am engaged, and which, although not yet completed, have already yielded curious results. I will not go into details, for I propose publishing the results later on in a more complete form.

The precipitate obtained by the action of nitric acid or heat upon an albuminous urine is not one simple albuminous body, but is composed of serum-albumen—possibly in several varieties, only distinguishable by their *physical* properties—and, in addition, a substance *chemically* different from serum-albumen—that is, globulin. This may be separated from the serum-albumen by saturating the neutralized urine with sulphate of magnesium in the cold; the globulin is precipitated in a soluble (non-coagulated) form, and the serum-albumen remains in solution. I am engaged in trying to determine what is the proportion of globulin to serum-albumen in albuminous urines, and whether this ratio varies in the different varieties of kidney disease, and in the different stages and phases of the same disease. Such a re-

search seemed likely to throw light on the intimate pathology of albuminuria, and I specially hoped to find by this means a chemical diagnosis between albumen due to organic kidney disease, and that occurring, usually in cyclic rhythm, without kidney disease. My observations are as yet too limited in number to permit me any generalization, but their results are certainly suggestive.

In four observations upon the urine of a case which presents all the most characteristic phenomena of functional albuminuria, I have found that the precipitate with nitric acid or heat is composed entirely of globulin, not a trace or only the very faintest trace of serum-albumen being present. This determination may be contrasted with that of a case of granular kidney, where, of the total amount of albumens, 70 per cent. was serum-albumen and 30 per cent. globulin; it may also be contrasted with that of a case of extreme general anæmia, and probably fatty degeneration of the kidney, in which, of the total amount of albumens, 30 per cent. was serum-albumen and 70 per cent. globulin. These figures are only approximations, but they will serve the present purpose equally well, with the decimals in which the determinations were worked out. In connection with the latter case it may be mentioned that, if one may trust the clinical features, the disease was at first functional and afterward became organic; and it will also be observed that, if the diagnosis be correct, there is here a kidney lesion similar to that found in one variety, at least, of puerperal albuminuria.

Now, to come more directly to the point in discussion, I have examined the urine of one case of puerperal albuminuria in which the pregnancy and labor had terminated without mishap, and in which the urine, although still containing a large amount of albumen, was rapidly becoming normal. Here I found, as in the case of functional albuminuria already described, that there was an entire absence of serum-albumen, and a precipitate with nitric acid and heat, which was composed entirely of globulin. Thus, if my observations be correct, and I of course admit that they must be multiplied before making any generalization, this form of puerperal albuminuria, which cures itself, is chemically allied to functional or cyclic albuminuria, and a strong suggestion arises that, as in the latter, so in the former, we have no organic kidney mischief. It is, from a practical point of view, highly desirable to diagnose during the prog-



ress of a pregnancy the one form associated with organic change, which will probably not recover, from the other form, in which, from what appears above, there is probably no organic change, and which will recover. Retinitis is a complication which, under other circumstances, is generally found in connection with organic change in the kidneys and serious symptoms. It is important, then, to ask if, when it occurs in puerperal albuminuria, it has the same grave significance; if the cases of puerperal albuminuria associated with retinitis invariably continue after delivery as cases of chronic Bright's disease; and, if finally, we may call this complication to our aid, possibly together with the chemical phenomena I have mentioned, in determining the prognosis of a given case. To summarize the above remarks, there is undoubtedly a form of puerperal albuminuria which is associated with an organic lesion of the kidney, and which we may call nephrogenic; but there is also another form in which there is probably no such kidney lesion, which is probably due, as I believe, to the profound blood change of pregnancy, and which may hence be styled hæmatogenic.

---

## Noises in the Head and Ears.

---

BY ROBERT BARCLAY, A.M., M.D.

---

Read before the Mississippi Valley Medical Society, at Quincy, Ill., July 13, 1886.

NOISE in the head and ears, commonly called *autophonia*, is the perception by audition of entogenetic vibrations produced in performance of the physiological functions of phonation, respiration, circulation, mastication and deglutition. This symptom, so frequently complained of, is of important significance in differential diagnosis and treatment of diseases of the ear. Until quite recently it was supposed to depend upon vague lesions of the inner ear and auditory nerve center. This error and the existence of published theories, which differ materially from each other, have led to indifference and indecision on the part of physicians in regard to these symptoms.

Three of these theories deserve special mention: First, that of Dr. Gustav Brunner, which holds that the "alterations in the hearing of one's own voice" are a phenomenon "of resonance, a vibration of air in the middle ear, shut in

by closure of the tubes," and that it seems "most natural to seek the cause of its frequent alterations in a stoppage of the tubes;" and Dr. Brunner calls this supposed condition "tympanophony." In addition to this he names, as factors in the production of autophonia, processes which "favor the conduction of noises to the nerves," and which give "abnormal reinforcement of the blood noises," and "hyperesthesia of the auditory nerve, or of the central nervous organs."

The second theory is that of Dr. Gruber, which holds that autophonia is a "consonance-phenomenon, caused by swelling of the mucous membrane of the middle ear."

Neither of these theories answers to conditions found in every case suffering from noises in the head and ears.

The third and last theory of autophonia to which I shall call your attention, is that of Dr. Samuel Sexton, of New York; this holds that "*the phenomena of autophonia are due to a disturbance of the normal equilibrium of tension of the transmitting mechanism of the ear.*"

Vibrations from the vocal chords and from musical instruments played in contact with any part of the head reach the drum-head by two routes, one being through the tissues of the head, the other through the surrounding air into the external auditory canal. Owing to the peculiar saddle-like articulation between the malleus and incus, which permits the former to move outward slightly without drawing the latter after it, vibrations by the tissue route pass out unperceived when the ear is in a healthy state. In the same way vibrations from circulation, respiration, etc., pass out by this route unperceived; otherwise confusion of hearing would result. When normal tension of the transmitting mechanism is disturbed in any form of ear disease, autophonia is almost invariably present. The two most frequent conditions of the transmitting mechanism producing this symptom are dislocation of the malleo-incudal joint and alteration in tension of the drum-head. The former occurs more frequently and persistently in the chronic than in the acute affections of the ear; the latter is found most frequently in manometric restoration of the drum-head.

The construction of the malleo-incudal joint is such that, when dislocation takes place, sound waves from without by aerial conduction are not transmitted to the perceptive center, while those from within by tissue conduction are perceived, for they act upon the stapes and incus irrespective

of the malleus and drum head. In chronic aural catarrh accompanied by catarrh of the Eustachian tubes, air does not gain free access to the tympanum as in a state of health. The atmospheric pressure from without, not being counterbalanced by equal pressure from within the tympanum, drives the drum-head gradually inward until dislocation, partial or complete, of the malleo-incudal joint is produced. This condition is accompanied by the phenomena of autophonia. On examining the drum-head in such cases, we find foreshortening of the handle of the malleus, extreme prominence of the short process from which umbrella-like folds of membrane extend forward, backward, and sometimes upward; the pyramid of light is absent, the drum-head retracted, sometimes so much so that it rests upon the promontory, and the stapes and long process of the incus are seen beyond and through the drum-head. When such conditions obtain and are not of too long standing, politzer inflation often gives relief from the annoying autophonia, provided normal tension is reestablished in the parts. In acute inflammation of the middle ear, accompanied with great secretion, the drum-head is forced outward and the malleus and incus are partially separated at their joint. This is attended with autophonia, from which relief is usually experienced when the secretion is removed by operation or by reabsorption of the secretions. Permit me, at this point, to call your attention to the fact that immediate relief in these cases may often be afforded by extracting the secretion through the Eustachian tube with a soft rubber Eustachian catheter attached to a suction syringe. A case so treated successfully has been reported in the medical press by Dr. Samuel Sexton, of New York, his patient being the well-known surgeon, Gen. J. D. Bryant, of that state and city.

Ignorance of the *modus operandi* of sound transmission and of the cause and nature of autophonia has led many aurists to condemn the tuning-fork as unreliable and useless in differential diagnosis of diseases of the ear. In middle ear disease the tuning-fork is better heard through the tissues proportionately to an increasing defect in aerial transmission, while if the perceptive apparatus of the inner ear alone be affected, it is better heard, if heard at all, by aerial conduction. We may formulate this thus: "Perception of vibration by tissue conduction varies inversely as that by normal aerial transmission." Knowledge of this fact enables us to afford relief

to totally or partially deaf patients, who can hear the sound of their own voice. In many cases we find the otacoustic fan, mouth-trumpet, etc., useful for conversational purposes or in instruction. Where some hearing power remains in both ears, perhaps the most serviceable instrument for teaching the patient to use his own voice is one invented by Dr. Sexton and presented by him to the American Otological Society at its last annual meeting. This instrument resembles a binaural stethoscope which is self-retaining in the patient's ears. It has two receiving trumpets, each of which independently communicates by flexible tubes with both of the metallic stethoscopic tubes. Into one of these trumpets the teacher speaks, after which the pupil repeats into the other the sounds or words which he has just heard and which he is striving to imitate.

In many cases the tension of the transmitting mechanism is altered by change of posture of the head, coughing, blowing the nose, yawning, swallowing, eructation, etc., producing alteration of audition and irregular autophonia. Confusion and uncertainty of audition and mental distress are increased by such changes, especially where both ears are affected, and while both are unequally affected the patient is often troubled with double hearing.

Where such patients require unimpaired hearing in order to earn their livelihood, the trouble has more serious import. Actors, singers, and performers on musical instruments, are unable to act their part or play, or sing with accuracy, and are often apt to think that others are in discord instead of themselves. Singers and actors so affected are often led to suspect trouble with their vocal organs, and seek relief in vain from treatment directed against those organs.

Variations in the tension of the transmitting mechanism from time to time produce alternate perception of entogenetic and ectogenetic vibrations, and consequent indecisions as regards their subjective and objective nature; a fact to be borne in mind by those who practice auscultation, for, when pressing the ear against a surface, the examiner must of necessity hear subjective vibrations, those propagated from within his own head, as well as those objective ones given forth by the patient. A failure to recognize and differentiate such subjective sounds leads to serious confusion and grave errors in diagnosis.

Varying audition and uncertainty as to the subjective or objective origin of sounds heard, if associated with mental



weakness or worry, may lead to aural hallucinations, and these may become even delusions. I have seen three such cases in which relief was afforded by treatment directed against the existing ear disease. In such cases treatment directed against the central nervous system will prove impotent to cure, unless attention be paid and proper treatment directed to removal of the peripheral aural excitant.

The prognosis in autophonia, under proper treatment, is favorable, complete cure being the rule in acute cases, while great relief may be afforded in the more chronic ones.

3101 Olive Street, St. Louis, Mo.

—*Weekly Medical Review.*

---

## Varicocele.

---

BY PAUL F. EVE, M.D.,

Professor of General, Descriptive and Surgical Anatomy, Medical Department University of Tennessee (Nashville Medical College).

---

VARICOCELE may be defined as a varicosed condition of the spermatic veins within the scrotum, while cirsocele is used to denote a varicosed condition of the veins of the cord and testicle. These two terms are, however, used synonymously to express any abnormally varicosed condition of the spermatic veins independent of the location affected. The disease always commences in the spermatic cord, and generally makes itself known by a heavy and often smart pain, which from time to time darts to the testicle and loins. The ailment, however, frequently develops itself without any inconvenience. This disease confines itself mostly to the left side, the proportion between the development upon the right and left side being as twenty to one in favor of the latter. This excessive frequency upon the left side is explained as follows: First, the left testicle hangs lower in the scrotum, and thus the veins of the left side support a heavier column of blood; second, the spermatic veins of the left side are pressed upon by the sigmoid flexure of the colon when distended; third, the spermatic veins of the left side join the renal vein at a right angle to the current of blood, thus impeding the rapid return of blood from the left testicle; fourth, the left spermatic vein is by some authorities stated to be poorly supplied with valves, but anatomical accuracy of the statement is questionable. The causes of

this disease may be divided into three classes: 1. Those which impair the general vigor of the part—viz.: masturbation, abuse of venery, chronic orchitis or repeated attacks of acute orchitis, lack of proper support, or from a relaxed scrotum, etc. 2. Causes from pressure—viz.: abdominal tumors, enlarged lumbar or inguinal glands, hernia, trusses or belts worn around the waist, accumulation of fat in the omentum or mesentery. 3. Causes by muscular effort—viz.: prolonged riding on horseback; prolonged rowing, exercise in running, waltzing, etc., whooping-cough.

Varicocele forms a pyramidal swelling in the scrotum, with its base downward and its apex extending upward toward the inguinal canal. The swelling has a peculiar knotted and convoluted feeling, and the sensation conveyed to the hand is often compared to that which would be given by a bunch of earth-worms. The tumor increases when the patient stands or walks, and almost, if not quite, disappears when lying down. The only affection with which varicocele could possibly be mistaken is that of scrotal hernia, and the diagnosis is sufficiently clear to be unmis-takable. We will point out a few of the diagnostic points. In varicocele the tumor is knotty and irregular, and feels like a bag of worms. In hernia the tumor is usually smooth on its surface and regular in its outline. In varicocele the tumor increases on the application of heat; in hernia this is not the case. The last diagnostic symptom I will give puts these diseases beyond question—viz.: In varicocele the tumor returns when the patient stands up, in spite of pressure at the ring. In scrotal hernia the tumor, if once reduced, can be prevented from a return by pressure at the external ring.

Having now clearly defined and located this disease, I now invite your attention to its treatment. This we shall divide into palliative and curative. In the palliative treatment, application of cold astringents, such as lead wash, solution of alum, aromatic decoctions, naphtha, etc., have been used. This, with a well-constructed supporter, are the only means that have as yet been brought forward. Possibly the best apparatus for the support of varicocele is the one invented and now largely used by Dr. Morgan, of Dublin, which consists of a piece of webbing four and a half inches long, three and a half inches wide at one end, four inches at the other, and gradually tapering to the narrower end; a piece of thick lead wire is stitched in the rim of the

smaller end; two tapes sewed along the entire length of the webbing, and the sides furnished with neat hooks, a lace and a good tongue of chamois leather. When the suspender has been applied to the testicle, the tapes are to be attached to an abdominal belt. Legions in number are the operations which have been suggested and practiced for the radical cure of this affection. I will briefly pass some of them in review, leaving for the last the one which, in my hands, has proven the most successful. According to Celsus, the superficial veins were cauterized with a pointed iron, and the whole bundle of deep veins tied and extirpated. Dr. Charles Bell's operation consisted in the separate tying of one or more venous strings. The modern operations which are proposed and have had numerous advocates are those of Ricord, Vidal, Lee, Wood and Annandale. Ricord's method consists in introducing subcutaneously in opposite directions, but through the same aperture, two double ligatures, one beneath the spermatic veins, isolated from the vas deferens, and the other above them, so that there shall be a loop and two ends of the ligature on each side. The ends are then threaded with the corresponding loops, and attached to a light yoke provided with a screw, by daily turning which they are constantly drawn tight, thus effectually strangulating and ultimately cutting through the veins, from which the ligature drops in the course of the second or third day. Vidal's method consists in passing a steel pin, perforated at both ends, below the veins and between them and the vas deferens, and through the same aperture a silver wire above the veins and between them and the skin. The wire is threaded through the perforations at each end of the pin, which is then rotated in such a way as to twist the wire and roll up and firmly compress the veins. The wire is twisted more and more tightly each day, until the veins are cut through, usually at the beginning of the second week, when the pin and wire are easily withdrawn.

Lee's method consists in passing two needles beneath the veins and between them and the vas deferens, about an inch apart, pressure being then made by means of elastic bands passed over the extremities of the needles. The veins which are thus compressed at two points are next divided subcutaneously between the needles, which may be removed on the third or fourth day. Another method recommended by the same surgeon consists in cutting away a portion of the scrotum, compressing, dividing and searing with a hot iron

the affected veins, and finally closing the wound with a carbolized suture.

Wood's method is an ingenious modification of Ricord's, in which the veins are surrounded subcutaneously with a metallic ligature, and the ends of the ligature pass through and are secured by a light spring, by the action of which the wire is constantly drawn tight.

Annandale's method consists in excising a portion of the enlarged vein, as practiced by Marshall and Steele in cases of varix of the extremities. These operations, as stated by Ashurst and others, are attended with some risk, and can only be justifiable in exceptional cases.

The operation as practiced by myself consists, first, as suggested and practiced by Sir Astley Cooper, in cutting away a large portion of the redundant scrotum; in next exposing the veins and in ligating them with a carbolized silk suture. The parts are then brought together by means of silk sutures, and the scrotum held with firmly applied adhesive strips. The sutures are removed between the fourth and eighth days. What I claim for this operation is that it is less hazardous, and that the results in my hand have been more satisfactory than any of the other operative procedures.

—*Southern Practitioner.*

---

### The Materies Morbi of Malarial Fever.

---

CONSIDERING the evidence now at our command upon the infectious nature of malarial fever, we are almost persuaded that we have at last reached the materies morbi of this disease, in the plasmodium malariae, which Marchiafava and Celli describe as being present in the blood of all persons sick of this malady.

Numerous other pathogenic organisms have been described by various observers as the cause of malarial fever, and among the first may be mentioned an organism described by Salisbury, who claimed to have found in the blood of patients affected with malarial fever a body belonging to the unicellular algæ. He claimed to have produced the fever by having persons sleep in a room in which there was fresh earth containing this organism. At present there are few who credit these statements of Salisbury, and in consequence they have sunk into oblivion and have naught



but a historical value to recommend them. Lanzi investigated the vegetable life of the Campagna and Pontine marshes, and describes, as a reward for his work, what he considers a form of spherobacteria. He thinks this organism possesses characteristic fermentive properties, and, when having gained access to the human system, has, by virtue of this ferment, the power of producing malarial fever. This organism is of a black color, and he attributes the pigmentation of the tissues and the melanæmia to its heaping up in the capillaries.

Afanassieur believes the black pigment to result from the heaping up of a chromogenic bacterium, which he thinks is the etiological factor in producing the disease.

Up to the time of its production, probably the publication to which the most importance was attached was that of Klebs and Tomassi-Crudeli, who described as the agent in the production of this disease a bacillus that they found in the earth of marshy districts, and which they claimed to have cultivated, and, by inoculation with it, to have produced the disease in rabbits. These experiments were carefully repeated in every detail by Sternberg, with, in each instance, only negative results, nor has any other competent mycologist met with aught but failure in his efforts to confirm their statements.

Laveran, a French Army Surgeon, investigated the disease in Algeria, and described (*Nature Parasitaire des Accidents de l'Impaludisme*, etc. Paris, 1882) as a result of his labors, organisms which he finds in the blood of malarial patients, and which he takes to be the causative elements in the production of the disease. When seen under an amplification of 400 or 500 diameters, he describes these bodies as being of three varieties.

Bodies No. 1, he says, are elongated, and often curved like a crescent, though sometimes they are oval. Their length is 8 to 9  $\mu$ , and their width 3  $\mu$ . Their contour is very delicate and colorless, except where pigment granules are contained in them.

Body No. 2.—This body presents a different aspect according as it is in motion or at rest. In a state of repose it appears as a body somewhat larger than a red blood-corpuscle, having in its interior black pigment regularly arranged in a circlet. When in motion there are seen attached to the organism delicate filaments which are in active movement.

Body No. 3, while primarily spherical in form, is seen to

pass through stages in which great variations in outline are observed.

Besides the bodies described, he saw in the blood small, brilliant, round, mobile bodies without specific characteristics, and, also, grains of pigment of a fiery red and of a pale blue color. In four cases examined after death, the brain, spleen and liver presented the characteristic appearance, and microscopic examination revealed the presence, in each instance, of these bodies in the capillaries. He thinks these bodies belong to the *oscillatoriae*, and has given them the name of "*oscillatoriae malariae*."

Kelsch calls attention to the presence of pigmented bodies in the blood of malarial fever patients, and considers their presence diagnostic of the disease.

Richard describes an organism in the blood of patients suffering from malarial fever. His description of the body, though differing from that given by Laveran for the bodies observed by him, still may be considered as confirmatory of Laveran's observations, for it is probable that the bodies seen by Richard were identical with those of Laveran, the difference in description resulting from their being in one of the many transitional stages at the time of observation.

Councilman and Abbott, in the *American Journal of the Medical Sciences*, April, 1885, gave the result of post-mortem examinations on two fatal cases of the comatose form of malarial fever. They described, as a result of these autopsies, the characteristic chocolate color of the brain, the bronzed liver, the enlarged and blackened spleen, and, in short, the appearance of the viscera so common to this disease.

Upon microscopic examination of sections of these tissues, they detected in the red blood-corpuscles and free in the capillaries, small, round, hyaline bodies whose nature they were at a loss to interpret. They were examined under a  $\frac{1}{20}$  oil immersion lense, and an Abbe substage condenser, and their behavior with the different reagents accurately noted. While in many respects these bodies answered to the description given by Laveran, yet it was difficult to reconcile the appearances made out by them, not without difficulty, under so high an amplification, with those given by Laveran, and which were apparently easy of demonstration under so comparatively low magnifying power as 400 or 500 diameters. Their examinations of fresh blood, made at that time, from other patients suffering from malarial fever,

gave only negative results. In concluding their paper, the authors remark—"We present here the facts only as we have found them; we confess our inability to say what these h<sub>2</sub>aline bodies are. That they have been seen before by other observers appears most likely."

Apparently without their being aware of it, this paper of Councilman and Abbott was antedated by about five months by the first of a series of publications by Marchiafava and Celli, who have given the results of a large number of autopsies on patients dead of this disease and many examinations of blood during life. They describe in the blood of all malarial cases, especially those in which the typical fever is present, a small body which readily stains with the analine dyes and which has for its habitat the body of the red blood-corpuscle, though they are also found free in the blood. It is described as appearing as a round, spindle-shaped, oval or irregular structure which may or may not contain black pigment granules. When examined in a fresh state in the blood these bodies are seen to possess an amœboid movement, which movement is lost in all artificial media in which they may be manipulated. The forms of this body in which the filaments are present and which appear to be identical with body No. 2 of Laveran, seem to occur less frequently than the structures that are devoid of these flagellæ, as they were only observed in four out of forty-two examinations. The round pigmented variety is usually present in greatest numbers. When occurring in the form of pigmented crescents the authors consider it an indication of a more intense degree of infection, this being the stage of the organism most common in the pernicious form of the fever.

They consider the many forms of this body as developmental phases of one and the same parasite—the specific parasitic element of malarial fever. It is not looked upon by them as one of the bacterial forms, but as a representative of the class of protozoa, and they give to it the name of "*Plasmodium Malariae*." Their efforts to cultivate this organism in artificial media have given throughout negative results, though their inoculations of blood of malarial patients into healthy human beings resulted in producing a typical intermittent fever in three out of five inoculations; the remaining two they state, though not negative, were not sufficiently positive to warrant their claiming them as successful. Notwithstanding their failure to cultivate this

organism, they consider themselves justified in regarding it as the etiological factor in malarial fever.

In reviewing the above contributions to the subject of the etiology of this malady, it will hardly be denied that, if its parasitic nature be admitted, the weight of evidence is in favor of the bodies described by Marchiafava and Celli.

It illustrates most clearly the value of the caution laid down by Koch: that in investigating diseases for their cause, we should not confine our search to bacterial forms alone, but should be prepared to encounter other varieties of vegetable and animal life that possess fermentive properties which may, when introduced into the human system, have the power of producing disease.

It must not be considered, however, that we accept these publications without reserve as conclusive proof of the etiological value of these bodies, for, with such a limited knowledge of the life history of the organism, such a step would be unjustifiable in the extreme. Up to the present, all efforts to study this organism in any other medium than that in which it is found have failed, but at the same time there are constantly being put forth efforts to discover some substance or method by which it may be artificially grown, and until such efforts are successful, the value of this body in the role claimed for it must necessarily be held *sub judice*.  
—*Maryland Medical Journal*.

---

### The Prophylaxis of Phthisis.

---

NOTWITHSTANDING the recent discoveries made in the etiology of phthisis, very little progress has been shown in the successful treatment of this distressing malady. It is the painful experience of physicians to watch cases, from the earliest signs of consolidation in the apex, through their gradual downward course to a fatal termination. Occasionally the disease is checked for some years, and more rarely quite cured. The general experience, however, is a sad one, and the result can too often be certainly prognosticated from the beginning. The manner in which the disease can be prevented becomes, therefore, a question of vital importance. We must, in the first place, inquire what classes of persons are predisposed to the affection. These may be divided into two classes—first, those who belong to families in which there is a hereditary taint. It has been



estimated that in about fifty per cent. of the cases there is a hereditary predisposition to the disease. We have here, then, a class of cases in which we may employ all the means at our command to prevent the development of the disease.

It is of great importance to begin this measure of prophylaxis in childhood. They should be, if possible, put under the most approved dietetic and hygienic conditions. "A healthy dwelling, on a dry soil, and with spacious sleeping apartments, perfect cleanliness, efficient ventilation, abundance of sunshine and fresh air, a life of vigorous activity, and a liberal and varied dietary—these seem to be essential conditions." How often do we see the first of these inflections disregarded. In this country particularly, houses are often built in hollow, damp places, so that they may be protected from the cold winds during the winter. We have seen as many as six persons, members of the same family, die of phthisis in a house of this kind. When houses are better situated, how careless people often are about the condition of the basement! No house is quite healthy in this respect unless the soil is excavated under the whole house, and the floor cemented and thoroughly drained.

Another means of prophylaxis, and one which is most frequently disregarded, is the separation, as far as possible, of diseased from healthy members of the family. We are confident that phthisis is a contagious disease, and may be communicated from one to another. The degree of separation required is not of such a character as to distress the one affected. The patient should sleep in an apartment by himself, and when it is necessary that he should be waited on, some nurse outside of the family should, if possible, be procured, one in whom there is no hereditary tendency to the disease. Residence among the mountains and sea voyages may be of benefit to those who can afford them.

The second class of cases are those who have shown premonitory signs of the disease. Unfortunately, in most cases there are no definite signs until the disease has become seated. The premonitory symptoms vary in age as follows: hæmoptysis, sudden and unaccountable failure of appetite, with derangement of the digestive organs and marked failure of strength. When these conditions occur in members of a tainted family, the most active prophylactic means should at once be adopted.

## The Treatment of Granular Conjunctivitis.

---

IN the treatment of granular conjunctivitis one of two objects is to keep in view: either to subdue inflammation when this is already excessive; or, when it is deficient to excite it to greater activity, so as to lead to the absorption of the morbid tissue which has been formed. For the latter purpose various chemical applications have been used, and even inoculation with gonorrhœal pus; while attempts have also been made by scarification to lead to atrophy and absorption of the granulations.

One of the most recent methods proposed for the treatment of trachoma is that described by DR. CECCHINI SETTIMO, of Modena, in the *Gazetta degli Ospitali*, Nos. 100-103, 1885. It consists in destroying the granulations mechanically and chemically by scraping and cauterization. All the cases Settimo has seen involved the upper lid, which he turns up, protects the eyeball with cotton soaked in a solution of boric acid or smeared with an inert ointment, and scrapes out with a Volkmann's spoon as many of the granulations as possible. He checks the hemorrhage with cotton dipped in cold water, and then practices a vigorous cauterization with pure nitrate of silver. Before doing this he pushes the lower lid against the reversed upper lid, and places between them a little cotton soaked in a solution of chloride of sodium, to protect the cornea. After the cauterization, the upper lid is well washed with the same solution, followed by a cold solution of boric acid. For the subsequent pain, he instills a solution of morphia and atropia, and applies light compresses, dipped in iced water. In some cases he applies a leech, or leeches, to the temple. The patient is ordered to keep the head elevated and the eye cool with applications of cold boiled rice, washing it out with boric acid solution.

The operation is contraindicated only when there is pronounced hyperæmia, in which case it is important to cure or to diminish this before scraping. Settimo prefers not to use an anæsthetic, as the contraction of the palpebral muscles helps the scraping process, although this is quite painful.

The operation may be done at one sitting if the granulations are soft and not very vascular and the infiltration is not very great; but, if the granulations are hard and

cartilaginous, it is advisable, but not necessary, to make the scraping in two or three sittings, at intervals of not less than three days. Chemosis is to be combated by taking blood from the temple by incision of the external angle, as in the method of Gräfe, and by deep incisions in the conjunctiva.

Settimo has used this method, combining it with the administration of iodide of potassium in twenty cases, with the most brilliant results, and naturally recommends it very warmly for general adoption.

More recently, KRAMSZTYK, in the *Gazetta Lekarski*, has called attention to a method of treating trachoma which was originally proposed by Wicherkiewicz, and which consists in crushing the granulations between the thumb-nails of the operator, or by means of a pair of forceps. The operation is very painful; and, although it has succeeded in a number of cases, it does not appear to have any advantages over the method of Settimo, especially if the granulations are very numerous.

Both of these methods are so heroic that surgeons must be strongly convinced of their utility, and of the necessity for having recourse to them before they are likely to be generally employed. Meanwhile, it is interesting to note, that MINOR, in the *New York Medical Journal* for July 31, 1886, reports that he has had most excellent results with powdered boric acid dusted over the conjunctiva two or three times a day, or less frequently. The application causes pain lasting about thirty minutes and a free serous discharge, which is soon followed by relief. The improvement in the conjunctiva and the clearing up of the cornea may not be very noticeable for a week, but after this time it will be apparent. Minor has found that boric acid ceases to be tolerated after three or four weeks, when some other drug must be substituted.—*Phila. Med. News*.

---

### The Influence of Malaria and Quinine upon Pregnancy and Parturition.

---

THE questions relating to this subject, of great and practical import to all practitioners in malarial districts, are set forth in a study of the matter by G. T. M'Keough, of Chatham, Ontario, published in the *Canadian Practitioner* for August and in *The Epitome*. The author writes:

In the first place, are pregnant women liable to suffer from intermittent fever or other manifestations of malarial toxemia? or does the state of pregnancy confer upon them a condition of immunity from the action of this poison? Credé (*Monatsch. fuer Geburtsh.*, Band. xv., S. 1, 1886,) states that in Leipsic during the years 1856 to 1859 there was almost absolutely no case of ague in a pregnant woman. Griesinger (*Virchow's Handb. der Spec. Path. und Ther. Infect. Krank.*, 1856,) found that during the prevalence of a quartan fever in Prague, only two out of 8,639 pregnant and parturient women were attacked. On the other hand Loov states that it is very common for pregnant women to have intermittent fever. Playfair says that the occurrence of hypertrophied spleens in infants has been often observed in malarious districts, and consequently believes that the disease must frequently occur in intra-uterine life. Goth, of Klausenburg (*Zeitsch. fuer Geb. und Gyn.*, Band. vi., S. 17, 1881), asserts that in a severe outbreak of yellow fever 46 out of 881 pregnant women were affected. My own notes agree more nearly with the later observers referred to. Of two hundred and twenty-eight (228) cases of pregnancy investigated by me, 36, or 15.8 per cent., exhibited some form of malarial poisoning.

Secondly. When malaria attacks a pregnant woman does it exert any remarkable effect upon the course of pregnancy? To this query my observations give a very decided affirmative answer. Of the thirty-six women who contracted malaria during their period of gestation, all of whom received treatment, some, however, in a later stage than others, seventeen either aborted or were delivered prematurely. Malaria may not have been the sole cause of the miscarriage in each case, but as they all suffered from this toxic condition at the time of the accident, I believe it to have been a prominent factor in the etiology.

While authorities differ so widely on the last two questions, these discordant opinions extend equally to the action of the remedy upon which all depend in the treatment of malaria of pregnancy. Schroeder and others maintain that it is extremely problematical whether quinine has an oxytoxic action or not. Cazeaux considers it a certain preventive against premature labor, whilst many others assert that it has a decided ecboic action. Hausman (*Berliner klin. Wochenschrift*, September 11, 1882,) records a case of well-marked uterine contractions following the adminis-



tration of quinine in a case two months advanced in pregnancy.

I have given quinine both in large and small doses in many cases for the purpose of quickening or rendering more efficient labor pains in cases of inertia of the uterus, or for stimulating the uterus to contraction when the escape of the amniotic fluid has not been followed by pains. I have also frequently administered it for intermittent fever, neuralgia and other malarial phenomena during the course of pregnancy, and in only two cases have I ever seen any perceptible ecboic action follow its use.

From the action of quinine in these two cases, which I think is sufficiently definite, I infer that in certain rare instances quinine overlaps its ordinary physiological area, so to speak, and exceptionally produces uterine contractions.

The fourth and last controversial point upon this subject which I desire to refer to is the effect of labor upon a malarious attack. Ritter believes that the tendency of parturition is to arrest a malarious attack, in explanation of which he suggest that the hemorrhage may be the cause of the attack, whilst Goth, on the other hand, states that an attack will be prolonged by child-birth. My own cases induce me to concur with the last-named observer.

The readers of the *Review* certainly are in a position to have made valuable observations regarding this matter, that still rests in great obscurity. We should like to have them contribute their experience.—*Weekly Med. Review.*

---

### A Peculiar Pathogenic Cause.

---

IN the autumn of 1884, a coachman in Russia, who had been in the habit for years of sleeping with his horses on the straw or in the hayloft, and had occasionally been drinking with them out of the same trough, was sized with pains in the left chest. In October, several abscesses formed below the left mamma. They gradually increased in number, and changed to ulcers.

In August, 1885, he was admitted into the Jewish Hospital at Berlin, and there came under charge of Dr. J. Israel, who reports the case in the *Centralbl.f.d. Med. Wissenseh.*, May 1, 1886. The patient then was greatly emaciated, and his left thorax was decidedly shrunken. The latter was covered with abscesses and ulcers, whose secretion contained

many stellated fungi. These are also continually present in the sputa, which, usually muco-purulent, occasionally is tinged with blood.

In March of this year the patient died, evidently of complete exhaustion, superinduced by incessant diarrhœa, which yielded to no treatment.

The autopsy revealed as the only focus in the left lung a cavity situated in the lower part of the upper lobe immediately beneath the upper surface. The process of aktinomykotic degeneration had spread from the torn and irregular anterior wall of this cavity through the thickened pleuræ to the peripleural tissues, and penetrated the wall of the thorax at numerous points. The liver, spleen and intestinal mucous membrane were in a state of amyloid degeneration.

*In the aktinomykotic cavity of the lung a foreign body was found, which was of the size of a split pea, resembling, microscopically, a piece of tooth, and was proved such by its microscopical and chemical examination!*

Thus, for the first time, evidence has been adduced in favor of the hypothesis made by Israel, that the lung-aktinomykosis is caused by the aspiration of germs from the buccal cavity, and that at times carious teeth form the breeding place of these micro-organisms.

The pathological specimens were presented to the Fifteenth Congress of German Surgeons, and a detailed report of the whole will be published in the annals of the latter.—*Med. and Surg. Reporter.*

---

## The Treatment of Syphilis.

---

WE are surprised to learn from Dr. James Wilson (*Lancet*, March 27, April 3, 1866,) that but indifferent success attends the treatment of syphilis in England. The doctor ascribes this to the bad methods of English surgeons in using mercury, iodide of potassium and other good drugs. He holds that to administer mercury by the mouth is the worst way of giving it, and that the inunction plan is the best. For its best effect the skin of the part about to be anointed should be prepared by washing thoroughly with soap and water; or a general bath be taken at a temperature of 95° or 96°, which is preferable. An experienced rubber should be employed, and he will receive no bad consequences from the mercury if, previous to rubbing, he smears his hands

with soap or lard. On successive days different parts of the body should be rubbed, and the sequence should be: First day, both legs; second day, both thighs; third day, abdomen and breast; fourth day, the back; fifth day, both arms; sixth day, both legs again. On each day from twenty to thirty grains of mercurial ointment are to be rubbed in on each side of the body, the inunction being preceded by a warm bath, and followed by an hour's rest. The rubbing should be continued from fifteen to twenty minutes. Follicular inflammation may be avoided by shaving the part about to be treated. [Our preference is for the bends of both elbows, the sides of the thorax and abdomen, the inner sides of both thighs, and the bends of both knees, as sites of inunction, as thus hairy parts are avoided. The skin of these parts being thin, the mercury is absorbed]. The whole palm should be used in rubbing, gloves avoided, and considerable pressure employed.

The diet and hygiene of the patient should be of the best. Salmon, eels, mackerel, Finnan haddock, salt fish, cheese, salads and raw fruit are to be abstained from. One or two glasses of milk should be daily drank. The mouth should be frequently rinsed with the following:  $\mathcal{R}$  Acetate of lead,  $\mathfrak{Z}\text{iv}$ ; powdered alum,  $\mathfrak{Z}\text{vss}$ ; distilled water,  $\mathfrak{Z}\text{xvj}$ ; aromatic water,  $\mathfrak{Z}\text{viiij}$ . Dissolve the lead and alum-salts separately in the water, then mix and stir well together; either filter or allow to settle, then decant and add aromatic water.

The author advocates putting the patient upon the use of inunctions as soon as an induration is made out. When inunctions are begun, they should be continued without a break. He has noticed that during the inunction treatment the patients are often unable to sleep at night. One of the first indications of the good effect of the mercury is an increase in body-weight, and, when the normal weight of the body is reached, or when the weight becomes stationary, there is no use in keeping up the inunctions for more than eight or ten times longer. After a course of inunctions, the potassium iodide should be given in small doses and for some time, to continue the good effect of the mercury. After a course of inunctions—say, eighty to one hundred—it is rare to have relapses, at least for a long time, or even for life.

Brief mention is made of mercurial baths, hypodermic injections of mercury, Zittmann's decoction, and the potassium iodide.—*N. Y. Med. Jour.*

## Evolution in Pathology.

---

It needs no foresight to see that pronounced significance will ere long be attributed to the Darwinian aspects of pathology. There has, perhaps, been some tardiness in applying the all-embracing principles of evolution to phenomena which fall within the special cognizance of the pathologist; but progress in this direction has been made, and, though slow, it has been sure.

Already in this connection several lines of thought have been taken up; and, carefully followed, they promise results of the greatest interest. It has been suggested that enchondromata of the limbs of man and of many animals are growths homologous with structures which always exist in the selachian fin, and that many other so-called abnormal developments may be regarded as instances of reversion. Darwinism teaches that the developmental history of the individual is an abbreviated history of the development of the race to which the individual belongs; and the above suggestion concerning the homology of certain enchondromata is one which arises out of a consideration of the supposed ancestral history of man. Regard, too, must be paid to the inter-reactions of incidental forces and living things, for such inter-reactions are largely operative in the production of varieties. There are, in fact, two sets of factors—heredity and environment—concerned in the coming into being of new forms of life; and in the coming into being of new diseases, Sir James Paget has pointed out how these factors are to be considered. There is, again, the matter of correlation (correlation of structures and association of functions), to which Darwin drew special attention; and it seems that a knowledge of it also is of profound importance, as serving to throw light upon facts of every-day clinical experience.

Another Darwinian line of thought has been forcibly presented by Dr. Aitken. It has for many years been maintained that close genealogical, or at any rate gradational, relation exists between the *materies morbi* of remittent, that of intermittent, and that of enteric fever; again, between that of enteric fever and that of typhus; between also that of enteric fever and that of scarlet fever; and between that of scarlet fever and that of diphtheria. Dr. Aitken has been ably advocating extension of careful observation upon these and such like relations. Those who believe in the



germ-theory as applicable to most infectious, contagious, and miasmatic diseases, and at the same time adhere to the creed of the evolutionist, see no reason for supposing that pathogenic micro-organisms form an exception to laws which are applicable, it would seem, throughout Nature. And though skeptical concerning many of the explanations which have been advanced in this connection, we may yet allow that some amount of truth lies behind; and this despite the fact that the conversion of *bacillus subtilis* into *bacillus anthracis* in the laboratory has been abundantly refuted.—*Brit. Med. Jour.*

---

### On the Value of Boric Acid in Various Conditions of the Mouth.

---

BY A. D. MACGREGOR, M. B., KIRKCALDY.

---

Boric acid is now officinal, and justly so. It has long been used in various metallurgical and ceramic operations, and more recently its preservative power has been abundantly demonstrated. It is this antiseptic power which gives it its great therapeutic value. It is a very stable compound—one of the most stable of the acids; it is not volatile, and only exerts its action when in solution; fortunately, however, it is soluble in more than one menstruum. Up till now, its chief application has been in connection with modern surgery, where the boric ointment, lint, and lotions all hold a prominent place. There are spheres of usefulness for it, too, in medicine; and one of these is in diseases of the mouth. It is the benefit of its local action we usually wish to gain, for, though sometimes given internally—as in irritable conditions of the bladder—its topical antiseptic effect is more often desired. In connection with its local application in various diseased conditions of the mouth, its solubility in water and glycerine, its unirritating character, its comparatively innocuous nature, and its almost tastelessness, are greatly in its favor. More particularly is this the case in treating such conditions in children, whose oral cavities cause them so much annoyance. Speaking generally, boric acid will be found useful in all conditions of the mouth, fauces, pharynx and nose, where there is any abrasion of the epithelium; whether it be used as a powder, gargle, mouth-wash, pigment or confection. More

definitely, I may say, it is not contra-indicated in any of the forms of *stomatitis*, though scarcely severe enough for the graver varieties.

In *simple catarrhal stomatitis*, a mouth-wash, containing from 10 to 15 grains to the fluid ounce, speedily cures the condition, and exercises the same beneficial influence in the *ulcerative* form, though there, in addition to the rinsing of the mouth, a local application in the form of the powder or pigment should be made to the individual follicular ulcers. The powder simply consists of finely powdered boric acid, mixed in various proportions with starch; the pigment is a solution of boric acid in glycerine (1 in 4 or 5). In both cases, the addition of chlorate of potassium is advantageous; indeed, I usually combine it, but it is not essential.

Nothing I know of is at once so rapid and so efficient, in the treatment of *parasitic stomatitis* or *thrush*, as this remedy. The youngest children do not object to its application, and, occasionally, you have to caution against its too frequent use. The *oïdium albicans* quickly succumbs to its influence. I am well aware of the great value of nitrate of silver in many of these conditions; but, I am also alive to its extremely disagreeable and persistent taste, and the dislike which precocious children at once take to it. For thrush in children, I especially recommend boric acid, either as a mouth-pigment or as a confection. Honey and sugar have both been condemned, as being inadmissible, in combination, for the treatment of thrush; but, so far as children are concerned, I must say I consider a confection (though made with honey), which has been impregnated with boric acid, gains more by its palatableness than it loses by the tendency of the saccharine matter to further the growth of the fungus. The boric acid at once does away with this tendency. Let the pigment be frequently painted with a brush over the patches, never omitting to do it after food has been taken; or, a little of the confection simply allowed to dissolve in the mouth; and the days of the fungus will soon be ended. I have found boric acid, combined with its salt (borax), markedly beneficial. Borax alone, however, is not nearly so good.

In *pharyngitis*, and *relaxed conditions of the throat*, a gargle, containing boric acid and glycerine, with either tannic acid or alum in addition, ought not to be forgotten.

Let me allude to another condition, in which I have found combinations of this substance helpful and grateful to the

patient. I refer to the condition in which we frequently find the mouth, tongue and teeth in severe cases of typhoid fever. The mouth is hot; the lips dry, cracked, and glued to the sordes-covered teeth by inspissated mucus and saliva; the tongue dry, or even glazed and hard, brown or black, crusted with a foetid fur. Under such circumstances, a pigment, containing boric acid (30 grains), chlorate of potassium (20 grains), lemon juice (5 fluid drachms), and glycerine (3 fluid drachms), yields very comforting results. When the teeth are well rubbed with this, the sordes quickly and easily become detached; little harm will follow from the acid present. The boric acid attacks the masses of bacilli and bacteria; the chlorate of potassium cools and soothes the mucous membrane; the glycerine and lemon juice moisten the parts, and aid the salivary secretion. I consider this application well worth a trial.

So much for the soft parts; a word in conclusion regarding the teeth. Few medical men, I suppose, have ever given a prescription for a tooth-powder (such a matter is beneath their notice), and the selection of the ingredients for the various powders and pastes in vogue for the purpose of beautifying and cleansing the teeth is left entirely in the hands of those who certainly should not know better than medical men. I have frequently trespassed on this debatable ground, and recommended a particular dentifrice. In view of the extremely important part the teeth play in the economy of life, I never hesitate occasionally to inquire as to the attention they receive.

A tooth-powder should possess certain characteristics; it should be antiseptic, cooling, agreeable to taste and smell, and have no injurious action on the teeth. After use, it should leave the teeth white, and a sensation of freshness and cleanliness in the mouth. As an antiseptic in this connection nothing can displace boric acid. For years I have used the following powder, and can recommend it: Boric acid, finely powdered, 40 grs.; chlorate of potassium, 3ss; powdered guaiacum, 20 grs.; prepared chalk, 5i; powdered carbonate of magnesia, 5i; attar of roses, half a drop. The boric acid in solution gets between the teeth and the edges of the gums, and there it discharges its antiseptic functions; the chlorate and guaiacum contribute their quota to the benefit of the gums and mucous membrane generally; the chalk is the insoluble powder to detach the particles of tartar which may be present, and the magnesia the

more soluble soft powder which can not harm the softest enamel.

It is only right to say that boroglyceride (Barff) can replace boric acid in almost all the forms of administration I have enumerated; it is efficacious, slightly, and pleasant to the taste.—*British Medical Journal*.

---

## Effectual Treatment of Hysteria.

---

BY DR. MARK CHAUMONT.

---

MUCH has been said concerning hysteria for many years. Some describe it as a physical manifestation of little consequence; others attach great importance to it as a phenomenon of the intellectual order. Some go even so far as to suggest things most *outré* of those patients capable of being hypnotized, and who, on awaking, execute faithfully the orders given. Hysteria, in short, expounded by some magnetizer ignorant of medicine, and conducted in fashionable drawing-rooms, is paraded among the lower orders of society before interloping and dull amateurs. We do not hesitate to say that these things are sad enough. For us, a convulsion of hysteria is a serious malady, and we place a just estimation on the means of curing it. As for making it an amusing puppet, bearing the sign and life of a nervous affection, we regard it as most reprehensible.

Seeing that so little is said of the therapeutics of hysteria, I feel it incumbent on me to refer in a few words to some happy results in my private practice. As physician to a manufactory employing a very considerable number of women, I have seen much hysteria, and have come to the conclusion that it is a much more serious affection than is generally believed. In a certain number of patients, I commence at first by giving attention to the general condition. To this effect I prescribe cod-liver oil, bitterwort, iron, quinine, beer, cold baths, etc. Having thus prepared the way for special treatment, I administer, if the attacks of hysteria appear frequently, three teaspoonfuls of Henry Mure's syrup in a little water, after each meal, during a month. The crisis is arrested; the patient is less nervous, more calm, better disposed, and performs her work with animation. I take advantage of this improvement to suspend the medicine and prescribe exercise, order milk in the way of



diet, and to carry out certain recommendations appropriate to the condition, situation and idiosyncrasies of the patient. At the end of a month or six weeks and sometimes two months, unless an attack of hysteria should occur in the interval, I resume as before the use of the syrup in the same doses, during a month (menstrual period included); then I discontinue it one, two or three months, in the meantime supporting the general system by appropriate nourishment, and ordering, according to the case or the season, cold water, sulphur, or alkaline baths, and dry friction of the body morning and evening. I repeat this regimen in the same manner several times, and, most generally, the attacks of hysteria will have entirely disappeared at the end of a year or eighteen months. Of course these patients remain exposed to worries, irritabilities, vexations, passing jealous manifestations, restraint of rules, atmospheric influences, etc., but the attacks do not show themselves, or appear very rarely. The remedy, moreover, is so highly regarded, that the women themselves, when they feel *en-nerved*, as they express it, prescribe it and take it until they feel relieved.

Why has Henry Mure's syrup, which has been attended with such immense success in the treatment of epilepsy in Europe and America, not been placed at the head of anti-hysterical medicines? It succeeds, I affirm, in nine-tenths of the cases, except when given in relatively weak and intermittent doses. Whilst this remedy, so efficacious, has only determined the cure of a great number of epileptics by the aid of large and long-continued doses, it does not follow, on the contrary, that good results may be obtained in hysteria by means of a lesser dose and a usage not continued. This, I believe, has never been said, which is a matter of considerable practical importance.

The association of different bromides among themselves and the combination of certain therapeutic agents with the bromide of potassium, fail in their effects constantly. The bromide of potassium, moreover, is very rarely obtained pure. That which justifies the esteem of Henry Mure's syrup, is, that physicians all over the country know that the medicine contains a bromide exceptionally pure; that each teaspoonful represents exactly 50 centigrammes of salt, and that this preparation, applied to the treatment of nervous convulsions, has performed everywhere the most successful cures. There is nothing as successful as success. Henry

Mure's syrup may be obtained in all good pharmacies and from the manufacturer, M. Henry Mure, pharmacist, Pont St. Esprit (Gard.), France.—*Gazette des Hopitaux*.

---

## Microscopy.

---

### Parasites and Scorpions.

---

IN a discussion in the College of Physicians of Philadelphia, Dr. Joseph Leidy said:

"I have recently received for examination, from Dr. W. T. Belfield, of Chicago, three little nematoid worms, which, as stated in the letter accompanying the specimens, were referred to him by Dr. R. W. Gelbach, of Mendota, Illinois, who found them in the intestine of young, anæmic, but otherwise healthy, cats. Both gentlemen believe them to be specimens of *Anchylostomum duodenale*, and my examination has confirmed this opinion. On superficial inspection I supposed the worms might belong to *Strongylus tubæformis*, a closely-related parasite infecting the cat. The specimens, however, exhibit the same structure of the mouth as is described in the *A. duodenale* of man. Beneath the upper lip are four strong recurved hooks, and within the lower lip a pair of hooks. The finding of this parasite in the cat in this country renders it probable that it may also infect man with us, and is probably one of the previously unrecognized causes of pernicious anæmia. The occurrence of the same parasite in the cat is also of interest, as heretofore it has only been noticed in man."

I take the opportunity to exhibit several excellent photographs of trichina in the flesh of the pig and in that of a young woman, sent to me by Mr. Eugene A. Rau, of Bethlehem, Pennsylvania. The photographs were accompanied by a letter giving an account of four cases of trichinosis which recently occurred in a family in that town. The pig used was raised at home, and was stated at no time to have exhibited signs of being unwell. Two other hogs, raised on the same place, were examined and found not to be infested. Of the four persons infected, the mother, aged thirty-seven, and a daughter, aged thirteen, died, while the father and a younger daughter were recovering.

The photograph of the pork-section exhibits many coiled worms encysted; those from the deltoid muscle of the girl exhibit numerous coiled and a few extended worms lying loose among the muscular fibers.

Prof. Leidy also read a letter from Dr. V. Gonzalez, of Durango, Mexico, reporting the great prevalence of scorpions in that district, and the frequent fatality of their sting, especially among children, who die in a short time in convulsions. Dr. Gonzalez observes that a bounty is paid for the scorpions, and that some years over one hundred thousand are destroyed, but that they still continue to be abundant.

#### DISCUSSION.

Dr. W. T. Forbes said: With reference to the second statement with regard to trichinosis, I would ask Dr. Leidy if the description which he gave of the trichina being found in pork, which is contained in the communication which he read before the Academy of Natural Sciences some forty years ago, was not the first description of the parasite being found in an article of diet? I ask this question because it has been repeatedly stated in Berlin that the trichina had been found there prior to that time.

Dr. Leidy: I believe that mine was the first notice of the parasite occurring in the pig. It had been previously discovered in man. I was led to find it in the pig after having seen it in man. Dr. Goddard noticed it in a subject in the dissecting-room, in this city, several years before I observed it in the pig. The parasite was at first considered to be of no importance. Some years later, in an epidemic of trichinosis in Germany, the parasite was discovered in many of the persons affected, and in the meat that had been eaten. I think that it was Leuckart who made some experiments and referred to my notice of the trichina in the hog. The parasite was first discovered in man by Sir James Paget.

The President, Dr. S. Weir Mitchell: Is there anything known of the steps by which this worm referred to in the first communication finds entrance into the system of man, and of the way in which it is supposed to give rise to anæmia?

Dr. Leidy: It is supposed that the anchylostomum gains entrance to man through the drinking-water, and, if that is the case, the cats probably obtain it in the same way. If cats, in this country, obtain it from drinking-water, it is

probable that with us man may do so. It is curious that it should be found in the cat. Generally we find that similar parasitic worms are found only in animals closely related to one another. So far as we know, the *Ascaris vermicularis* occurs in no other animal than races of men. The cat has its own ascaris, and this is found in various species of cats all over the world. There is another found in the dog, which is also found in the wolf. Again, the ordinary tape-worm of the dog is found in all sorts of dogs. I have a specimen from the wolf in the West, and I have another which Dr. Kane obtained from an Esquimaux dog in the North. As I have said, worms of the same species in the same stage usually infest only animals which are closely related.—*Medical Times*.

---

## Gleanings.

---

COLD APPLICATIONS TO THE PRÆCORDIA IN FEVER.—Grigorovich presents the following conclusions regarding the effect of applying cold water to the region of the heart, based on a series of experimental observations made in the Rostoff military hospital:

1. The cold undoubtedly reaches the heart itself, and thus produces an effect on its action.
2. This effect is particularly noticeable when the cardiac beats are increased in frequency in consequence of a high temperature quickly attained, and where a certain degree of sensitiveness to a high temperature exists.
3. The effect of cold is not marked at the end of a prolonged attack of fever, pathological changes having by that time probably become established in the cardiac muscle.
4. The local application of cold is only capable of protecting the heart-muscle from the effects of a high temperature when it is applied assiduously from the commencement of the disease.
5. Under its influence the action of the heart improves, the number of beats diminishes, while their force and amplitude increase.
6. Cold applied to the region of the heart diminishes the gravity of the *typhoid* condition and favorably influences the respiration.
7. With regard to the effect of cold applied to the region



of the heart on the course of the general temperature, Grigorovich can not at present express a decided opinion, as he did not investigate the question; but in the results which he obtained, indications may be found of the possibility of its causing some diminution of the temperature.—*The Practitioner.*

A CASE OF UNUNITED FRACTURE OF THE HUMERUS, AND A METHOD OF TREATMENT THEREOF BY METAL SCREW-TAPS.—These “ununited fractures” are frequently so troublesome that we are glad to note that before the Academy of Medicine in Ireland, Mr. Henry Fitzgibbon exhibited a brace fitted with drills and screw-taps for the fixation of the resected bones, and reported a case of ununited fracture of the humerus which he had successfully operated upon by this method. Mrs. T., admitted into the City of Dublin Hospital 13th of March, 1885, with comminuted fracture of humerus which refused union, was sent to seaside until November 14th, when she was readmitted with permanent non-union. Operated upon November 26th successfully by means of screw-taps and wire suture, which were removed on the 21st day after operation. The patient was exhibited to the Academy with firm union and a useful arm on April 16th. Mr. Fitzgibbon attributed the non-union to the pressure of the comminuted fragment being displaced upward, so as to cause pressure upon the brachial vessels, depriving the lower fragment of sufficient blood-supply.

The details of the apparatus could be secured by addressing the author, care of the *London Medical Press*, in which journal the report appears.—*Med. Reporter.*

BADLY MADE TRUSSES.—How frequently is more harm than good done by the use of a badly-made truss. Therefore, we note that Mr. Vincent Jackson, in describing some improperly made trusses, in one of our English exchanges, narrates the following case: A woman, aged 44, stated that, when 23 years of age, whilst laughing heartily, she felt something come into her right groin. By degrees a swelling appeared, and a truss was applied; but from this period, in spite of every kind of instrumental support, the hernia gradually increased until it reached very large proportions. As a rule, a night's rest had enabled her to return the hernia; but twenty hours before Mr. Jackson saw the patient symptoms of strangulation commenced. The

hernia was seen to be very large, occupying almost the upper half of the left thigh. It felt very tense, and seemed to contain fluid, intestine and omentum, as was verified upon the operating-table. The tumor being freely laid open, much red serum flowed away, and the huge coils of congested small intestine were reduced, although the neck of the sac was freely incised and stretched to its utmost extent. The omentum was carefully overhauled, but, as it was much changed in appearance, being puckered, thickened and altered in color, the whole was first secured by tying it at various points with carbolized silk, and then cutting it away. The sponge which had been placed over the intestines being removed, the neck of the sac was stitched together. Poupart's ligament and the fascia forming the outer edge of the saphenous opening were carefully approximated. As much of the sac as possible having been cut and torn away, the edges of the wound were united with sutures and drainage-tubes; and the dressings having been applied, the patient was removed to bed. The lady made an excellent recovery, and, although a light truss was directed to be worn, the cure was complete. The piece of omentum removed weighed one pound and a half.

BEAUTIFYING THE SKIN.—In the work on diseases of the skin edited by Professor von Ziemssen, Dr. Heinrich Auspitz, of Vienna, makes the following observations upon this subject:

1. A healthy integument is not necessarily beautiful. Even if all requirements concerning diet, residence, atmospheric and climatic conditions, etc., are carried out, the complexion is often extremely bad. The general condition of health has no influence upon the beauty of the complexion, though it has upon the health of the skin.

2. Cleanliness is a *sine qua non* of the beauty of the complexion, though it does not play a great part in the health of the skin.

3. Water is serviceable to the skin in only moderate amounts and at moderate temperature. Very cold or warm baths, when used to excess, diminish the elasticity of the skin and its power of resistance to external irritants.

4. Distilled and so-called soft water are more suitable for washing, and less irritating, than hard water.

5. The hard soda soaps are usually preferable to the soft potash soaps for toilet purposes. The quality of soaps

depends upon the quality of their constituents and the thoroughness of their saponification. Good soaps must not contain free alkali, or any foreign irritating substance. The addition of moderate quantities of perfumes does not materially change the quality.

6. Simple, finely ground powders, such as starch, magnesia, etc., are entirely innocuous, and often act as a useful protection against external irritants.

7. Frequent application of alcohol abstracts the water of the skin, makes it dry and brittle, and impairs its nutrition. This is also true of glycerine. All toilet washes containing alcohol to any considerable extent should be avoided.

8. This is true, to a still greater extent, of other additions to washes, such as corrosive sublimate, mineral acids, certain metallic salts, etc.

9. Camphor acts merely as a bleaching powder. This is also true of benzoic resin, sulphur flowers, and substances containing tannic acid.

10. The use of sweet-smelling oils and fats should be employed, to a greater extent than is now done, for toilet purposes.

11. This is particularly true with regard to the growth of the hair. The nutrition of the scalp should be increased by the rational application of fat (for example, in the form of oil baths by means of the application at night of a sponge soaked in oil upon the scalp), and the greater use of simple pomades. These should be applied to the roots of the hair rather than the shafts.

12. Substances should be avoided, or sparingly used, which abstract water from the skin and the roots of the hair.—*Southern California Practitioner*, August, 1886.

PERSISTENT SWEATING IN INTERMITTENT STAGES.—In *The Asclepiad* for 1885, vol. ii., pp. 190–192, there is related from the *Medical Press* the history of a case by Dr. Myrtle, of Harrogate, in which the patient, a man seventy-two years old, died from persistent sweating. Since then I have received the details of other cases, similar but not so severe, to one of which attention should be called.

In this instance the patient, Miss C. E. De M., has herself supplied me with the history of the symptoms and with a memorandum and temperature chart by Dr. Dabbs, of Shanklin, Isle of Wight, under whose care she remained

during the whole of the attack. Miss M. had suffered, three years previous to the occurrence of the particular symptoms now under consideration, from typhoid fever, and also from some signs of a tuberculous nature, so that she was an invalid before the attack. She took what she considered to be a chill in the summer of 1884, and suddenly began to perspire. The perspiration came on every day from ten to one o'clock, and again from ten to one o'clock in the night, with occasional repetition in the early part of the evening. During these times she was simply bathed in perspiration, so that all her clothing was completely saturated, the bed-clothes sharing the same saturation when she was in bed during the paroxysm. In order to give every attention to the various remedial measures that were suggested, a professed nurse was obtained from London, and all changes of treatment, general and local, were tried, but, as in Dr. Myrtle's case, without any effect. The perspirations began on August 1, 1884, and continued until the first days of November, when they suddenly and completely ceased. Owing to the existence of continued pain in the epigastrium, Dr. Dabbs inserted a seton over the seat of pain, and it is worthy of note that the cessation of the perspirations occurred at the time when the discharge began to take place from the seton. This practical fact deserves remembrance in similar intractable forms of the disease. Miss M. has had no recurrence of the intermittent perspirations since 1884.—*Dr. B. W. Richardson, in The Asclepiad* for July, 1886.

PUERPERAL TETANUS.—Dr. W. Netzel mentions in the *Hygeia* a case of puerperal tetanus. The patient was a woman of 25, a primipara, who was brought to the lying-in hospital by a midwife a day and a half after labor had commenced. The fœtus was dead, and its large head locked in the pelvis. The os uteri was five centim. in diameter, thick and rigid. Perforation was resorted to. The fœtus and placenta were expelled spontaneously five hours later. The cavity of the uterus was washed out with a three per cent. solution of carbolic acid. The temperature rose on the fourth day, and the lochia became putrid. Intra-uterine injections of a three per cent. solution of carbolic acid were used, and the vagina was washed out with sublimate. On the eighth day trismus and stiffness of the neck appeared. The following day there was stiffness in the shoulder and



spasmodic contractions of the facial muscles, with painful spasms. The temperature was  $41^{\circ}$  C.; pulse, 140. The woman died at midday. Chloral had been given, and subcutaneous injections of morphia and curare. On making a post-mortem examination an ulcer was found in the cervix reaching through the uterine walls to the peritoneum. There was parenchymatous degeneration of several organs. Dr. Netzel considered the tetanus in this case to be a symptom of general septic infection.

**THERAPEUTICS OF CHOLERA.**—Dr. Grant-Bey thus describes his method of routine treatment in cholera epidemics.

On July 14, when the malady was raging at Geezeh, at our very doors, by the request of the local board I drew up elaborate instructions about cholera, and indicated the remedies that should be used, viz.:

I. "A mixture," of which the following is the composition, and the instructions for use:

R $\bar{y}$ .	Tincturæ opii, . . . . .	℥ss.
	Spiritus camphoræ, . . . . .	℥ss.
	Tincturæ capsici, . . . . .	℥ss.
	Chloroformi, . . . . .	℥iiss.
	Spiritus vini rectificati, . . . . .	ad. ℥iiss.—M.

Sig.—For the premonitory diarrhœa of cholera, twenty drops for an adult and five drops for a child in half a wine-glass of water or chamomile tea every hour or every two hours, etc., till diarrhœa ceases; but if vomiting or cramps set in, then leave off the mixture and give the "Anticholérique Pasteur," of which the following is the composition and mode of administration:

R $\bar{y}$ .	Hydrargyri bichloridi, . . . . .	gr. ij.
	Spiritus chloroformi, . . . . .	℥x.
	Spiritus camphoræ, . . . . .	℥v.
	Tincturæ lavandulæ co, . . . . .	℥ss.
	Spiritus rectificati, . . . . .	ad. ℥ij.—M.

Sig.—To be used when diarrhœa can not be checked, and vomiting or cramps commence; a teaspoonful (℥j) to an adult and thirty drops to a child, in chamomile tea, every quarter of an hour, every half hour, every hour, etc., according to urgency of symptoms.

On July 15 the epidemic reached Cairo, and its suburb Boulak was devastated by it. Out of 1,800 men employed at the Boulak railway workshops, 59 died of cholera. Many

others who were attacked recovered after the prompt use of the remedies, and most of those who died did not take the medicine.—*Albany Medical Annals*, August, 1886.

LIGATION OF THE VERTEBRAL ARTERIES FOR THE RELIEF OR CURE OF EPILEPSY.—Dr. J. L. Gray, of Chicago, records three cases in which the method just indicated was advantageously pursued, and, basing his views on these and other records, presents the following conclusions:

1. Ligation of the vertebral arteries should take its place as a recognized procedure in the treatment of certain cases of epilepsy.

2. The operation should be confined to those cases in which the exciting causes of the attacks come from some region outside the brain.

3. The arteries should be tied as high up as practicable, and the ligature should include all the fibers of the sympathetic accompanying the vessel.

4. Where the side of the brain which is first invaded by the disease can be determined, the artery of that side should be ligated.

5. Where the invasion of the disease is apparently bilateral, both vertebrals should be ligated.

6. This operation should not be done as a substitute, but as an aid to other forms of treatment for the relief or cure of epilepsy.—*The Neurological Review*.

SOFT CHANCRE OF THE MIDDLE EAR. — The *Gazeta Lekarska*, a Polish medical journal, contains a report by Dr. Guranowski of a case of soft chancre of the middle ear. The patient was a woman with a phagedænic chancre of the genitals, who, from snuffing tobacco, managed to introduce the virus into the nose, where the septum had become ulcerated, with copious discharge of the foul pus. From this the infective material must have passed through the Eustachian tube into the middle ear. Deafness and pain were complained of, and subsequently perforation of the tympanic membrane occurred, a large quantity of purulent matter being discharged through the opening and infecting in its turn the external meatus. The case was treated by the introduction of iodoform into the ear and nose, and by injecting warm water through the ear by means of the Eustachian catheter. In a month's time the patient regained her power of hearing and completely recovered. Dr. Guranowski has a great belief in the efficacy of washing the

middle ear with warm water, having seen cases of severe inflammation recover under this treatment where it was feared that the only hope of saving the patient's life lay in trephining the mastoid process.—*The Lancet*.

**IODOFORM POISONING.**—In an article thus entitled in the *Boston Medical and Surgical Journal*, of August 5, 1886, Dr. E. G. Cutler presents a very full bibliography of the condition in question, together with the following conclusions:

1. Fresh wounds or unhealthy or tuberculous surfaces are the only ones fitted for the application of iodoform.

2. Only a thin layer or small amount of iodoform is to be applied.

3. When granulations appear healthy, iodoform should be omitted and some other non-poisonous substance substituted.

4. At the first symptom of poisoning, or coincidently with the original use of it, compounds of the alkalies and vegetable acids are to be given by the mouth at frequent intervals, as acetate of potash. If severe symptoms supervene, transfusion with common salt solution is to be resorted to, and the wound is to be washed free from iodoform with pure water and an alkaline carbonate solution, and afterward powdered magnesia is to be dusted on.

**FATAL RESULTS FROM "SPLITTING THE CERVIX."**—Dividing the cervix at the external, or at the internal os, or in the intervening portion, though not long since a comparatively frequent operation for dysmenorrhœa or sterility, is now very rarely done. Most operators now turn to dilators for the treatment of cases where incision was formerly done; one wing of the army of gynecologists still fights under the same banner of mechanical uterine pathology; only, in place of hysterotomes its enthusiastic soldiers use dilators. Possibly it is only a question of time when many of the dilators will be placed in the grave beside the hysterotomes, if the teaching of men like Duncan, Schultze and Williams prevails, and the mechanical theory of uterine diseases is cast aside.

However this may be, we have been somewhat astonished to know of the mortality which Sims had from this operation. Pajot states, in a recent lecture, that he knew of at least four deaths of women upon whom Sims had performed his operation of division of the cervix, and he believes that other similar accidents happened to him. In the light of

these facts, the profession is to be congratulated upon the fact that the operation has fallen into disuse.

DYSENTERY.—Dr. Samuel H. Singleton (*Mississippi Valley Medical Monthly*) says:

If called to a case of dysentery within twenty-four hours after the attack, and I find tormina and tenesmus very violent, which is generally the case, dejections mucous and bloody, I prescribe three grains of quinine every three hours, hot meal poultices to the bowels, and a tablespoonful of the following mixture every two hours:

R <sub>y</sub>	Sulph. magnesias, . . . . .	℥iv.
	Tinct. opii, . . . . .	℥iiss.
	Arom. sulph. acid, . . . . .	℥iiss.
	Water ad., . . . . .	℥iv.

M.

Generally, after the third dose of this mixture has been given, all of the above symptoms subside, the stools become serous and are passed without pain. In fact, a diarrhœa has been substituted for the dysentery. When, in spite of the above treatment, the bloody dejections continue mixed with pus, tormina and tenesmus more frequent, asthenia rapidly supervenes and collapse is imminent, a pill given every two hours of the following formula has wrought wonders in my hands:

R <sub>y</sub>	Pulv. opii, . . . . .	
	Iodoform, . . . . .	āā gr. j.
	Zinc. sulph. . . . .	gr. ij.

M.

I have treated twelve cases of dysentery with iodoform in the above combination, seven last season and five this season, and my experience has been highly gratifying, every case having been pronounced out of danger or convalescent before the seventh day of treatment, a majority of them before the fifth day.

HÆMOPTYSIS.—Dr. Horace Dobell recommends:

R <sub>y</sub>	Tinct. digitalis, . . . . .	℥ss.
	Ext. ergotæ, . . . . .	℥ij.
	Acidi gallici, . . . . .	℥j.
	Mag. sulph., . . . . .	℥j.
	Acid. sulph. dil., . . . . .	℥j.
	Inf. rosæ acidi ad., . . . . .	℥viiij.

M. Sig.—Take two tablespoonfuls every two hours.



INFANTILE DIARRHŒA.—The following compound, comminuted, complicated, shotgun prescription was introduced to us by our friend, Dr. J. P. McGee, and has served a most excellent purpose in the simple diarrhœa of infancy and childhood. It also serves well as a menstruum with which to combine more active remedies:

R̄	Fluid hydrastis, . . . . .	3j.
	Fluid ext. geranii, . . . . .	
	Fluid ext. catechu, . . . . .	āā 3iv.
	Fluid ext. leptandræ, . . . . .	3iiss.
	Potass. bicarb., . . . . .	3j.
	Acidi tannic, . . . . .	3ss.
	Bismuth subnit., . . . . .	3v.
	Spts. vini gallici, . . . . .	3j.
	Ess. menth. pip. . . . .	
	Ess. cinnamonii, . . . . .	āā 3ss.
	Syr. rhei arom., . . . . .	q. s. 3vj.

M. Sig.—One to two teaspoonfuls after each action from the bowels.—*Mississippi Valley Medical Monthly*.

INFANTILE COLIC.—The following is the modification of Dalby's carminative I spoke to you of, from which I have had almost universal satisfaction in the colic of young babies. It beats all the opiates and nauseous doses:

R̄	Magnes. carb., . . . . .	℥ij.
	Ol. anisi, . . . . .	mj.
	Tinct. cardamomi, . . . . .	
	Tinct. assafœtidæ, . . . . .	āā mij.
	Glycerine, . . . . .	3ij.
	Aqua menthæ viridis, . . . . .	
	Aqua camphoræ, . . . . .	ad. āā 3ij.

M. Sig.—Teaspoonful every half hour till child is comfortable.

Of course, this does not preclude warm baths, hot cloths on abdomen, relief of constipation, if present, massage, etc., but it does all opiates and soothing syrups.—Dr. J. P. McGee, *Mississippi Valley Medical Monthly*.

#### CARDIAC DROPSY.—

R̄	Sodii bicarb., . . . . .	3j.
	Tinct. digitalis, . . . . .	3j.
	Vini colchici rad., . . . . .	3iiss.
	Tinct. gentianæ comp., . . . . .	3iij.

M. Sig.—Teaspoonful in water after meals.

## Book Notices.

A TREATISE ON THE PRINCIPLES AND PRACTICE OF MEDICINE; DESIGNED FOR THE USE OF PRACTITIONERS AND STUDENTS OF MEDICINE. By Austin Flint, M.D., LL.D., Late Professor of the Principles and Practice of Medicine and of Clinical Medicine in the Bellevue Hospital Medical College, New York, etc. Sixth Edition, Revised and Largely Rewritten by the Author, Assisted by Wm. H. Welch, M.D., Professor in Johns Hopkins University, Baltimore, and Austin Flint, M.D., LL.D., Professor of Physiology in the Bellevue Hospital Medical College. 8vo, Pp. 1160. Philadelphia: Lea Brothers & Co. Cincinnati: R. Clarke & Co. Leather. Price, \$6.00. 1886.

The author of this work, Professor Austin Flint, was undoubtedly the most distinguished physician of this country. He held the same high position in the medical profession of the United States that Dr. Benjamin Rush did during his day, and which Dr. Jenners, of England, does in the profession of that country at the present time. Possessing a well-trained mind and disciplined to close and accurate thinking, he reasoned logically, making correct inferences. He was a person who could deduce truths from facts presented to him—forming conclusions from processes of reasoning as valid as discoveries made by the senses. Beginning in 1833 and continued for more than half a century, it is said that he possessed an unbroken series of records of cases in private practice and in hospitals covering sixteen thousand nine hundred and twenty-two folio pages of manuscript, written with his own hand. These records embrace carefully written histories of cases in all departments of practical medicine, observed under varied conditions of life, climate, and general surroundings. Soldiers in camps and barracks; the rich and the poor; those affected with diseases incident to lives of luxury and ease and paupers in hospitals; the pioneers of Western New York and the inhabitants of the Metropolis; patients in the wards of the almshouse and hospitals of Buffalo, of the Marine Hospital in Louisville, Ky., the great Charity Hospital in New Orleans, La., the Bellevue Hospital, the Charity Hospital, the dispensaries, and similar institutions in the city of New

York; cases observed in the experience of a quarter of a century as a general practitioner, and of more than another quarter of a century as a consulting physician, including the epidemics which have occurred in this country within the last fifty years. His original contributions to practical medicine, embodied in special treatises, in communications published in medical periodicals, and in transactions of medical societies, have left their impress upon many departments which, in recent years, have been classed as specialties; although he was a physician, never a specialist. Considering, therefore, his very long and intense labors in the profession as a practicing physician in public and private practice, his extensive, varied and elaborate literary contributions to medical science in the way of papers read before medical societies and communications published in medical journals, his high standing as author of a number of standard medical works, his great popularity as a teacher of medicine in various institutions of learning, it is no wonder that he attained to a position of eminence as a physician held by no other medical man.

No text-book upon the Principles and Practice of Medicine has ever met in this country with such general approval by medical students and practitioners of medicine as the work of Professor Flint. In all the medical colleges of the United States it is the favorite work upon Practice; and, as we have stated before in alluding to it, there is no other medical work that can be so generally found in the libraries of physicians. In every State and Territory of this vast country the book that will the most likely be found, on entering the office of a medical man, whether in city, town, village, or at some cross-roads, is Flint's Practice. We make this statement to a considerable extent from personal observation. It is the testimony also of others.

An examination shows that very considerable changes have been made in the sixth edition. Among the entirely new articles may be mentioned: Infectious Tumors; Syphilitic Disease of the Lungs; Cerebral Syphilis; Spastic Cerebral Paralysis of Children; Hereditary Ataxia; Myxœdemia; Multiple Neuritis; General Pathology of Fever; and Milk Sickness. In addition to these new features, many articles have been entirely rewritten; and in nearly every article changes and additions, some of them very important, have been made.

This edition contains a full consideration of recent discov-

eries concerning the bacterial origin of various infectious diseases, as will be rendered evident by a consultation of the article on Vegetable Parasites in the chapter on Etiology, and articles in the chapters treating of Tuberculosis, Typhoid Fever, Cholera, etc.

Dr. Wm. H. Welch, of the Johns Hopkins University, Baltimore, who assisted in the revision of the fifth edition, has also assisted in the revision of the edition before us along with Professor Austin Flint, Jr., M.D. Dr. Welch contributed the first seven chapters of Part I. and a large part of the eighth chapter. Besides he also revised, and in great part rewrote, the description of anatomical characters of the diseases considered in the rest of the volume.

As regards the entire work, to use the language of Dr. Welch, "the revision throughout has been thorough and complete, and it is believed that the new edition has taken cognizance of all of the more important discoveries in pathology and clinical medicine since the previous edition was issued."

The work undoubtedly may be regarded as fairly representing the existing state of the science of medicine with respect to the subjects of which it treats, and to reflect the views of those who exemplify, in their practice, the present stage of progress of medical art.

---

**RHEUMATISM: ITS NATURE, ITS PATHOLOGY, AND ITS SUCCESSFUL TREATMENT.** By T. J. MacLagan, M.D. 8vo, Pp. 277. New York: William Wood & Co. Cincinnati: Garfield.

This work belongs to the series of Wood's Library of Standard Medical Authors.

The author states that a perusal of the literature which bears on the question of the treatment of acute rheumatism (rheumatic fever) is a task from which few would rise with any definite idea as to how that disease is best treated. Purgatives, diaphoretics, sedatives, alkalies and alkaline salts, colchicum, aconite, quinine, guaiacum, lemon juice, sulphur, mercury, veratria, tr. of muriate of iron, etc., would each be found to have in turn attracted the favorable notice of one or more of those who have directed attention to the subject. Of all these different remedies not one stands out prominently, as that to which we can with confidence look for good results. We have, indeed, no remedy



for acute rheumatism—a malady which not unfrequently proves fatal, which is always accompanied by great pain, and is a fruitful source of heart disease.

Until recently, indeed, the profession has been at sea as to the treatment of acute or inflammatory rheumatism. Precisely opposite methods of treatment have been recommended at different times, and each one highly commended. Twenty-five or thirty years ago lemon juice was heralded as a specific—its beneficial effects being lauded in the highest terms. We have read many reports of cases that had been cured by its administration. Afterward, the alkaline treatment, as it was termed, was employed, and it seemed to gain more confidence than any previous method. The mode of using it, with many, was to administer the bitartrate of potash in solution, in as large quantities as possible without producing purging; and to sponge the surface with a solution of bicarbonate of soda. The object was to render the blood alkaline. The alkaline treatment still has its adherents, who continue to employ it. We consider it inferior only to the treatment by salicylic acid or its salts. We prefer, however, the use of acetate of potash to the bitartrate.

We once knew the health of a strong, robust physician, of middle life (forty years of age), weighing 175 pounds, permanently injured by treating him, when severely attacked by inflammatory or acute rheumatism, with quinine and alcoholic stimulants. He was confined to his bed and room for three months.

The old mode of treatment as all know, was the free use of the lancet, tartar emetic and calomel. With young, robust persons this plan of treatment not unfrequently was followed by speedy relief. With delicate patients it was injurious.

The author of the work before us states that in the course of an investigation into the causation and pathology of acute febrile ailments, which had for some time engaged his attention, he was led to give some consideration to intermittent and to rheumatic fever. “The more I studied these ailments,” he says, “the more I was struck with the points of analogy which existed between them. On a detailed consideration of these I shall not now enter. Suffice it to say that they were sufficiently marked to lead me to regard rheumatic fever as being, in its pathology, more closely allied to intermittent fever than to any other disease,

an opinion which further reflection and extended experience have served only to strengthen."

On page nineteen of the work the author says that there is no possibility of explaining the peculiarities of rheumatism by any view which does not recognize the existence and operation of a poison circulating in the blood. "No permanent external agency," he states, "can be regarded as adequate to the explanation of any one of them."

The peculiarities of the disease which point clearly to a blood poison as the cause, he states to be as follows:

"1. The tendency to its occurrence is hereditary—transmitted from father to son.

"2. It is especially liable to occur at a particular age—being rare before fifteen or after fifty.

"3. It is apt to attack the same individual again and again.

"4. It does not confine itself to one point, but affects several simultaneously or in succession.

"5. It attacks also the membranes of the heart.

"6. It very rarely terminates in suppuration.

"7. It is not much benefited by measures calculated to relieve simple local inflammatory action, but is speedily subdued by proper constitutional treatment."

But we must hasten with our notice of this very interesting work. The author claims the credit of having discovered that salicylic acid or salicine was specific in acute rheumatism. He says that believing in the miasmatic origin of rheumatism, it seemed to him that a remedy for that disease was most hopefully to be looked for among those plants and trees whose favorite habitat presented conditions analogous to those under which the rheumatic miasm seemed most to prevail. "A low-lying, damp locality, with a cold rather than warm climate, are the conditions under which rheumatism is most likely to arise."

On reflection, it seemed to him that the plants whose haunts best correspond to this description, were those belonging to the natural order *Salicaceæ*—the various forms of willow. Among the *Salicaceæ*, therefore, he determined to search for a remedy for rheumatism.

He began to use salicin, a bitter principle in willow bark, in November, 1874. "A short experience sufficed to show that my expectations were likely to be more than realized."

In a publication made in March, 1876, he said: "The more acute the case, the more marked the benefit produced

by salicin. In acute cases its beneficial action is generally apparent within twenty-four, always within forty-eight, hours of its administration in sufficient dose."

The work contains twenty chapters. The subjects of a few of them are: "The Varieties and Symptoms of Rheumatism"; "The Nature of Rheumatism"; "The Nature of the Rheumatic Poison"; "The Miasmatic Theory of Rheumatism"; "The Nature of Malaria";, "The Mode of Action of Malaria."

The work is worthy of an attentive perusal. There will be found in it many interesting features. The author has made the subject of rheumatism one of deep thought, and one can not give attention to this monograph without feeling that he has derived much instruction.

**HANDBOOK OF DISEASES OF THE EAR.** For the Use of Students and Practitioners. By Urban Pritchard, M.D. (EDIN.), F.R.C.S. (ENG.), Professor of Aural Surgery at King's College, London, Aural Surgeon to King's College Hospital, etc. With illustrations. 12mo, pp. 207. Philadelphia: P. Blakiston, Son & Co. Cincinnati: R. Clarke & Co. Cloth. Price, \$1.50. 1886.

The object of the author in presenting this little work to the profession has not been, as he states, to give an exhaustive treatise on Otology, but to afford physicians and students a practical manual which shall help them to recognize the various pathological lesions of the ear, to diagnose the different diseases, and to discriminate in the matters of treatment and diagnosis.

The most ordinary affection of the ear, in accordance with our observation, is deafness, either partial or complete. It is astonishing to us the number of persons we meet who are "hard of hearing." And this partial deafness, when it has become chronic, seems to be incurable. At least, we have never observed any case in which dullness of hearing having existed for some time, was followed by recovery. We feel sure that if some aurist could discover a means of relieving "hardness of hearing," he would soon be able to make a fortune.

But "hardness of hearing" is not the result of any one cause. The causes undoubtedly are numerous, dependent upon various pathological conditions. Sometimes, may be, following upon thickening of the membrana tympani; at

other times following upon closure of the Eustachian tube; again, consequent upon changes in structure in some of the nervous elements, etc. But whatever may be the cause, the student will certainly be able to treat it better after an attentive study of this work. As a matter of course, when the partial or total deafness has resulted from destructive processes, which do not admit of repair, there can be no cure.

Next to deafness in frequency the author ranks tinnitus aurium, or *disturbance* of hearing power. We have not unfrequently relieved this condition by the removal of large quantities of wax. We have sometimes been astonished at the vast amount of this material that has collected and been retained in the ear.

The work gives at the outset a very plain, lucid description of the anatomy of the ear. A number of cuts exhibit the external and internal meatus, the tympanic cavity, the vestibule, cochlea, semi-circular canals, Eustachian tube, styloid process, membrana tympani, malleus, incus, stapes, etc. An attentive study of the first chapter will afford a very satisfactory knowledge of the anatomical structure of the organ of hearing, which is an important matter in obtaining a correct idea of aural diseases.

The second chapter is devoted to a description of the various instruments employed in examining the ear, and for the purposes of treatment. Each one is illustrated by a cut. Among them is the tuning-fork for the measurement of the perceptive portion. We have not the space to copy the account of the use of this instrument. We can only refer to a case in which a tuning-fork applied to the bridge of the nose was heard the normal length of time, *i. e.*, 6"; applied to the right mastoid 3", and to the left mastoid  $\frac{1}{2}$ " +. Such indications, it is stated, point conclusively to a serious affection of the perceptive portion of the right ear. It is thus plainly set forth the mode of employing instruments for the purpose of diagnosis.

With the third chapter begins an account of the various affections to which the ear is liable, beginning with malformations, injuries and diseases of the auricle. In the various chapters which follow will be found a practical description of all the various pathological lesions incident to the ear, the proper method of diagnosing them, and showing how to discriminate in the matters of treatment and prognosis.

Students and practitioners will find the work an exceed-



ingly practical one, in which it has been the endeavor of the author to avoid controversial points, and to give simply the results of his own observation and experience. A work of the kind often proves of vastly more service to the practicing physician, whose time is much taken up in visiting and prescribing for patients, than a large exhaustive work which is filled with the discussions of many pathologists on pathological subjects. The ordinary physician is more greatly interested in the best methods of treating affections than he is in the pathological conditions upon which the diseases are dependent.

---

THROUGH A MICROSCOPE. SOMETHING OF THE SCIENCE, TOGETHER WITH MANY CURIOUS OBSERVATIONS INDOOR AND OUT, AND DIRECTIONS FOR A HOME-MADE MICROSCOPE. By Samuel Wells, Mary Treat and Frederick Leroy Sargent. 12mo, pp. 126. Chicago: The Interstate Publishing Company.

This is an interesting elementary work, very well adapted for those commencing the study of Microscopy. It first describes magnifying glasses, which constitute simple microscopes, and then considers the compound microscope. A little work like this one will be found very useful, until one has become somewhat familiar with the microscope and has obtained some skill in manipulating it, when he should enter upon the study of Carpenter's "Revelations of the Microscope," the best work upon Microscopy ever issued in the English language; Beale's "How to Work the Microscope," and Beale's "The Microscope in Practical Medicine."

Along with this little work, one should send for the catalogue of W. H. Walmsley, of Philadelphia (see advertisement), from which he will learn much about the different varieties of microscopes, objectives, slides and accessory apparatus generally. It is a price list, we know, but really it is an excellent educational work.

---

POISONING BY CORROSIVE SUBLIMATE.—Dr. Muller, of Berne, reports a case of carcinoma of the uterus for which hysterectomy was performed and a lotion of 1 in 4,000 of perchloride used in dressing the wound, the sponge being dipped in 1 in 2,000. Two days later albuminuria and diarrhœa with bloody stools set in. Death ensued on the third day, and there were ulcerations found in the colon.

---

## Editorial.

---

NOTICE. —Some of our subscribers, who have been negligent in paying their subscriptions, and have fallen behind in their accounts with us, will find, in the present issue of the MEDICAL NEWS, bills showing the amount of their indebtedness. We really hope that these bills will receive immediate attention, for we are greatly in need of money. Subscribers should not force us to compel our printers to wait for their money, or force us to pay them from other funds than the proceeds of the journal.

---

HYGIENE OF OLD AGE. —When an old man or woman has passed seventy years of age, especial care should be given the conditions surrounding him or her for the prolonging of life. At that period of life the vital forces are greatly enfeebled, and the powers of resistance, in consequence of age, are the weakest. A man of threescore years and ten, and over, is like an old machine that, by proper care given to its condition, has been kept running for many years, and is still able to do work; but its wheels, and axles, and pinions are much worn and are rickety, and if it should be pushed, even to a small extent, in excess of its diminished powers, it breaks down and can not be repaired, for every part of it is shattered. But if it should be worked by a careful and intelligent mechanic, who understands its condition and knows its capabilities, it can be kept in action a much longer time than would be possible if a careless engineer controlled it. In these fast times, however, it is generally not profitable to husband the resources of an old machine. But this is not true as regards our old men and women. It is desirable to hold on to them as long as possible (unless, may be, one or the other, or both, stand in the way of entering upon a large inheritance, and then the anxiety to keep them alive *sometimes* becomes diminished), and if we can succeed in prolonging their lives five or ten years, or more, it will greatly enhance our happiness.

We have seen it stated that human age is not to be counted by years, for that in some constitutions the general tissues are older at fifty than they are in others at one hundred. And this, too, it is said, not because the general tissues have been overworked and thus become enfeebled, but because

they were originally endowed with a shorter longevity. This may be true in part. But we can accept it to the extent only that some persons by the overwork, the vices, or errors, of some nature, of their ancestors have had entailed upon them, through no fault of their own, a brief period of life to live. A large number of the human family die sooner than they otherwise would on account of some local weakness. The large majority die early in consequence of faults of their own in living. With some overwork, either mental or physical, has destroyed them; with others constant anxiety and trouble, brought about by disappointments and misfortunes; with others, their vices; with others, again, ignorance of the common laws of health, or, where that does not exist, an inability to change their mode of life, and live under more favorable circumstances.

Prof. H. C. Wood, in a late number of the *Annals of Hygiene*, says that, as the teeth in old age are lost, it is of the highest importance that old people should secure efficient artificial teeth. The thorough chewing of food, he remarks, is even more necessary in the old than in the young, because in the former the digestive powers are apt to fail. Assuredly, if the muscles of the limbs are weakened, the stomach, and other organs, must also be weakened; and the stomach, therefore, should have its work made as easy as possible, and nothing tends more to secure that than properly masticated food.

The kidneys, too, should be looked after, for they are great depurating organs; and it is essential that, in their weakened condition by age, their functions should not become embarrassed. We had recently a patient, seventy-six years of age, in whose urine there could be seen, every day, a red brick-dust deposit, consisting probably of uric acid and urates, resulting from defective nutrition. It is very essential that these materials of waste and imperfect digestion should be eliminated. If they were not, a fatal result would soon follow. How important, therefore, that they should be kept in order, and not permitted to be still further weakened by overstimulation by means of food and taking medicines, such as Warner's Safe Cure, etc. Meats and other rich foods, used in excess, increase always the strain upon them. Milk and milk products, or preparations of breadstuffs cooked with milk, should form a very large part of the food of old people.

Old people should have moderate exercise. Walking short distances every day is advisable, if the weather permits and

they are not ailing. To eat heartily and take no exercise is apt to superinduce congestion of some organ. Excessive eating should be avoided under all circumstances.

Prof. Wood advises the daily drinking of wine in small quantities. We, however, differ with him; unless, may be, in cases where there is marked debility, or the person has always been accustomed to moderate drinking.

We always make it a point, in the case of old people, to advise to use great care in avoiding cold. The aged are carried off more frequently by contracting cold than by any other cause. They should always remain indoors when the weather is damp or at all inclement. If circumstances force them out, the greatest care should be exercised as to their dress. The clothing should be made of woollen goods as far as possible. It is warmer in winter, if properly made, and cooler in summer. In summer a thin woollen undershirt should be worn, and in winter a thick one. The blood, with them, is thin, and is deficient in the heat-making elements. An old person will sometimes complain of being cold sitting in a room in summer-time.

It is advised by some that whenever there is any tendency to abdominal weakness, to wear an abdominal flannel bandage. It is urged that as the mass of blood of the human body is in the abdominal organs, and as this is especially so when the circulation is sluggish, these organs should be supported; otherwise that sudden congestion of one or more of them may suddenly occur, leading to a fatal result.

We will conclude this article by making a quotation from Prof. H. C. Wood, to whom we have already alluded. He advises that all old persons should avoid whatever may cause a "strain" upon any one or more of the organs, and in doing this, he says, they should not be rapidly hauled over rough roads. But here is the quotation:

"An old man exposes himself to inclement weather, and especially to a high wind, which suddenly drives the blood from the surface upon the internal organs; and, at the same time, by its very force checks the enfeebled movements of respiration, which aid in forcing the blood out from those organs. As a result, the man perishes at once, because he has thrown too great a strain upon a weak heart; or, if able to momentarily resist the strain, dies in a few days of pneumonia, due to the congestion of the lung. I have known the sudden shock of good news to strike the old man down, as fatally as the pole-axe fells the bullock, by causing the



blood to rush with renewed force through the brain, and tear its way through the weakened walls of the blood-vessels. Again, the violent emotion of sudden bad news may overwhelm a heart which, with care, would have sufficed for its duties for many years."

He also says that it is important to arrest an incipient disorder in the aged.

---

THE AMERICAN ACADEMY OF MEDICINE.—We have received, just previous to the closing of this number of the MEDICAL NEWS, a meager account of the proceedings of the first day's session of this organization, meeting this year at Pittsburg. The meeting at Pittsburg constitutes the tenth annual session.

The Academy was called to order at 10 o'clock A.M., on the 12th inst. Dr. S. Sutton, the President, presided. There were fellows present from all of the principal cities. The report of the Council showed the following list of fellows elected: Drs. M. H. Borland, Pittsburg; Karl H. Von Klein, Dayton, O.; A. B. Thrasher and Philip Zenner, Cincinnati; R. L. Hodgden, Arlington, Mass.; W. B. Canfield, Baltimore; F. Wing, Chicago; Lester Curtis, Chicago; R. R. Bunting, Philadelphia; S. J. Jennings, Beers, Pa.; Geo. W. McCaskey, Fort Wayne, Ind.

Dr. Dungleison, of Philadelphia, Secretary of the Association, read a report on the present working laws regulating medical practice in the United States. He said the existing legislation was defective because bills do not receive adequate consideration. The report was a caustic review of the present deficient legislation and its results.

Dr. Frederic H. Gerrish, of Portland, Me., read an essay on "The Best Equipment for Medical Study," in which he recommended the study of languages.

The Convention was discussing these papers when an adjournment was taken for dinner.

In the afternoon Dr. R. Lowrie Sibbett, of Carlisle, Pa., read a paper on "The Two Standards, Literary and Medical." Dr. Sibbett stated that the standard of medical education in the United States is lower than in almost any other country. He adverted to the infamous traffic in diplomas in this State, and called attention to medical schools that issue diplomas after a seven or eight months' course.

The special committee on the "Best Preliminary Educa-

tion for Medical Students" then presented their report, in which they recommended a classical education for all students. A paper on "The Status of Medical Education in the United States," was then read by Dr. John D. Kelly, of Lowville, New York.

Dr. L. P. Bushick, of Wilmington, Del., followed with a paper on the "Advantages of a Classical Education to the Medical Student and Physician." The session closed with a paper on "Prolonged Gestation," by Dr. J. C. Morris, of Philadelphia.

In the evening Dr. R. S. Sutton, President of the Academy, delivered his annual address. In the course of his remarks he stated that there were 101 medical colleges in the United States at present, attended annually by nearly fifteen thousand students, graduating each year almost half of this number.

We understand that a number of amendments to the Constitution were proposed, but, after some discussion, their further consideration was laid over until the meeting of next year, without any action being taken upon them. Among the amendments offered and laid over was one to admit certain distinguished medical gentlemen as members of the Academy, who, unfortunately, during their younger days, had not had the opportunity of acquiring such literary qualifications as would entitle them to the degree of A. B. or A. M.

---

THE NOSE AND THE FACE.—The *Med. and Surg. Reporter* says: "Do not cut off your nose to spite your face." We presume that several of our readers have heard the same advice uttered a time or so in their lives. We do not believe that any one would know what the expression meant if an explanation were not made to him. Like a great many other familiar sayings, it needs to be explained. As used by the *Reporter*, it means that a distinguished physician should not stay away for spite from the meeting of the International Medical Congress, which meets next year at Washington, simply because the Congress was organized upon the conviction that there were a few medical men in cities west of the Allegheny Mountains that had some knowledge of scientific medicine—who approximate in learning and talent to physicians living in Boston, New York, Philadelphia and Washington. For if he should act

thus, a Western doctor may perchance turn up at the Congress who, although he should not have the exalted reputation of Dr. Stay-at-home-for-spite, may happen to know something, or, at least, convince the foreign visitors that he does; and bringing there some of his best work, which the said foreign visitors seeing and hearing, and at the same time becoming acquainted with him and most favorably impressed by him, may go away at the close of the Congress bearing with them the conviction that he is a leader in American medicine; that as we are a fast-living people on this side of the Atlantic, and changes rapidly occur among us, they will naturally conclude that those with whose names they have hitherto been familiar have run their course and have been succeeded by a class such as the Western doctor whom they met.

The *Reporter* says that for any one of the gentlemen of exalted standing and position, having become offended because some other medical men have received acknowledgment of possessing high merit, to stay from the Congress is to be like "*Mary in the dumps.*"

How "*Mary in the dumps*" "*cut off her nose to spite her face*"—figuratively speaking of course, for we can not believe that she subjected herself to an amputation of the kind, doing it herself at that—we do not exactly understand. We presume, though, that her "*dumps*" brought upon herself some displeasure of her parents, by which she was deprived of some sweetmeats which she would have obtained if she had not allowed herself to fall a victim to the "*dumps.*"

But interesting though the subject may be, we have neither the time nor space to pursue it further.

---

INFANTS.—Dr. Jacobi, of New York, states that there is no instance on record of cancer of the rectum in an infant. He says that in consequence of the hollow of the sacrum being less curved in the child than in the adult, the rectum is shorter, straighter, and more uniform in shape, hence liquid or semi-solid feces, after passing the sigmoid flexure, are rapidly evacuated. Because of the small size of the infantile pelvis the colon is thrown into folds, so that instead of one, there may be several flexures. Clinically, the presence of the redundant intestine is of great interest, from the fact that it may give rise to difficulty in determining the

true position of the sigmoid flexure, and may prevent the passage of the intestinal contents, leading to the erroneous diagnosis of complete obstruction.

The same authority considers that *fissure of the anus* is more frequent in infants than is generally supposed. It generally appears as a narrow, reddish or grayish slit, observed on separating the margins of the anus, seldom extending beyond the sphincter, while the surrounding parts present a normal appearance. The fissure is extremely sensitive to the touch, and an examination frequently causes a contraction of the sphincter that is partly voluntary and partly spasmodic. The pain during defecation is intense and may last for several hours. Polypus and fissure may rarely co-exist. There are then frequent discharges of blood and excruciating pain.

---

COMPARATIVE TESTS OF INFANT FOODS.—W. H. Rassman, M. D., Attending Physician, North Eastern Dispensary, and Late House Surgeon, Maternity Hospital, New York City, under date of August 1, 1886, reports as follows: "Impressed with the importance of the proper feeding of infants, I determined to make as thoroughly as possible a series of comparative clinical tests, both in the North Eastern Dispensary and in private practice. I obtained eleven varieties of food, using of each one or more packages, according to the duration of the case. I used as little medicine as possible, and took particular care to have the directions on each package of food carefully followed. Some foods I found absolutely worthless, if not injurious, containing undigested starch and other elements. Others seemed useful in simple mal-nutrition, but were too laxative and irritating in their action to be safe in intestinal derangements. The Food, however, which in any and every case fulfilled all requirements was Lactated Food. In mal-nutrition it was "a complete substitute for mother's milk," acting in a way which charmed the mother, and was highly appreciated by the physician. In the exhaustion consequent on summer diarrhoea and entero-colitis, its effect was wonderful, filling out the emaciated body and checking the disease with little or no medicine. In cholera infantum, however, it achieved its greatest triumph, holding the disease in check in a grand manner, and finally restoring fully the lost weight and strength.



THE POPULATION OF FRANCE.—M. Bertillon, in the course of a lecture recently delivered at the Hygienic Exhibition in Paris, stated that out of every 1,000 inhabitants of Paris only 360 are natives of the city, 565 belonging to the departments of France or the colonies, and 75 being foreigners. There are in proportion as well as in actual numbers more foreigners in Paris than in most other large cities, the proportion being 75 in 1,000 against 14 per 1,000 in Berlin and Trieste. The movement of the population for the past year throughout France was also very unsatisfactory, the total number of births being 922,361, or upon the average 30,000 fewer than for the last fifteen years. Moreover, out of this total 74,118 were illegitimate, or rather more than eight per cent. of the whole, this being the largest number of illegitimate births ever recorded. Upon the other hand, there has been a light reduction in the number of deaths, the total for 1885 being 836,897; but even so, it will be observed that the excess of births over deaths was only 85,464.—*Lancet*.

---

VACCINATION IN JAPAN.—The Japanese do not appear to have lost any of their faith in the efficacy of vaccination for the smallpox. They have just enacted a very stringent law on the subject, for, besides ordinary vaccination in the first year of infancy, it provides for at least two subsequent re-vaccinations at intervals of from five to seven years, so that by the time a child has reached its fifteenth year it will have been vaccinated three times. During epidemics of smallpox, local authorities also have power, when they deem it necessary, to order the vaccination of all the inhabitants of their districts, irrespective of the vaccinations required by the law.—*Sanitary Record*.

---

PEACOCK'S BROMIDES is a valuable remedy, and I can heartily recommend it to the profession where the use of such a preparation is indicated. It takes the place in our list of remedies that has long been needed. It is all that is claimed for it.—A. M. Chord, M.D., Logansport, Ind.

---

I HAVE the pleasure to say that I have used Peacock's Bromides with entire success in vertigo and congestive headache in the case of my wife. It is the best brain and nerve sedative I ever used.—A. L. Anderson, Rhea Springs, Tenn.

# THE CINCINNATI MEDICAL NEWS.

VOL. XIX. No. 227. }  
Old Series.

NOVEMBER, 1886.

{ VOL. XV. No. 11.  
New Series.

## Original Contributions.

### Intra-Pulmonic and Bacillicide Medicator, with Set of Spray Apparatus for Broncho-Tracheal and Subglottic Medication.

BY WADE MINOR LOGAN, M.D., CINCINNATI, O.

As may be readily inferred, the application of bacillicide, or other local treatment, to the ulcerated surfaces of tubercular cavities within diseased lungs, and of pulmonary abscesses, with the device which I propose, involves an operative procedure through the chest-wall overlying the lowest portion of the diseased part.

While some operative procedures, which consisted principally in the injection of various medicated liquids into lung cavities, have one time and another been practiced, without brilliantly successful results, to be sure, they have accomplished much good in some cases in which "the expectoration and general symptoms have for a time abated," while "the operation is less mischievous than might have been expected."\*

Our thanks are therefore due to Baglivii (1696), Barry (1727), Richter (1803), Ramadge (1836), Hastings and Storks (1845), Koch and Mosler (1873), Pepper (1874 and 1881), and Fenger and Hollister† (1881), for the genius and

\* See Stille and Maisch's Dispensatory, third edition, 1884, p. 836.

†The very interesting, instructive, and successfully managed case of Drs. Fenger and Hollister was one of "Large Fœtid Abscess Cavity in Middle Lobe of Right Lung Caused by Suppuration Around a large Echinococcus Cyst of Twelve Years' Standing"; its chronicity, and other features termina-

courage with which they demonstrated beyond controversy the safety\* and utility of such treatment.

I thus mention briefly the history of thoracocentesis pulmonis, sufficiently to show that it is, all things considered, fully as safe as any, except the most hazardous operations; its occasional abandonment being due to imperfect apparatus and limitation of skill.

A study which I gave this subject nearly thirteen years ago, after reading the exceedingly interesting experiments of Drs. Koch and Mosler, published at that time, suggested to my mind a method of treating lung cavities, which I have good reason to believe will succeed in a large proportion of cases.

As I have stated before, the principal feature of all direct medication of lung cavities in the past has been the injection of medicinal solutions. And our learned and greatly admired fellow-countryman, Dr. Wm. Pepper, of Philadelphia, revived with encouraging success, in 1874, local treatment, using a delicate cannulated needle attached to a hypodermic syringe, and introduced through an intercostal space.†

However "good, bad, or indifferent" may have been any of the solutions that were used by injection, certainly no really brilliant results could reasonably have been expected, because it is quite obvious that their utility, owing to grav-

ting in "perfect recovery," going far to show the tolerance and recuperative power of the lung tissues. (See *American Journal of the Medical Sciences*, October, 1881).

\*In regard to the matter of safety, there can not, of course, be any danger in the use of this apparatus as proposed. To be sure, it is not an uncommon occurrence for a phthisical patient to feel remarkably comfortable for the time, and die suddenly; and, if his demise should happen during or soon after an operation of any kind, there would be doubtless persons ignorant or bigoted enough to attribute his decease to the operation. Such a fatal termination of the patient's life, liable to occur at any unforeseen moment in cases of consumption, ought not to argue anything against the operation *per se*, especially when made by physicians of learning and experience.

I was once listening with a stethoscope applied over the scapula, to the breathing of such a patient, when he suddenly and unexpectedly fainted. As he had never fainted before, the ignorant people about him who had never seen such an instrument as the stethoscope employed till then, attributed the cause of the spell to its use, and censured me severely for using "such an infernal thing upon him."

†(See *American Journal of the Medical Sciences*, October, 1874, and *Transactions of American Medical Association*, 1880). In the latter volume (page 259), Dr. Pepper six years later says: "It will thus be seen that more extended experience has amply confirmed the conclusions reached in 1874."

ity, was *necessarily limited to the lower parts of the cavity*, with, of course, the point opposite to the nozzle of the syringe, if injected forcibly enough to reach across to it, unless the patient were additionally inconvenienced with sufficient of the fluid to fill the entire excavation.

Now, according to the method which I propose, bacillicide, antiseptic, local stimulating or other topical remedies may be applied thoroughly and evenly with what I choose to call an

#### INTRA-PULMONIC AND BACILLICIDE MEDICATOR.\*

An instrument which I have invented and had made for this purpose consists of a fine cannulated, gold, iridium-pointed needle, three and one-half inches long, perforated with seven diverging capillary openings on one side, radiating equally in a row, occupying slightly less than one-fourth of an inch in length, beginning as close as possible to the point. More rows involving a larger number of openings might seem preferable, but owing to the necessarily delicate caliber within a tube of availably small diameter, such an increase in the number of holes would render the instrument impracticable and inoperative, as I have ascertained to my satisfaction, as well as cost.

Adjusting this tube, as a tip to an ordinary Richardson's atomizer connected, by a strong hose, with an air receiver containing an atmospheric pressure of fifty pounds or more to the square inch, and introduced at a safe point through the chest wall, as close as possible to the floor of the cavity† (see Fig. 4) or abscess to be treated, the solution in the fluid holder may be thrown in a very fine fan-shaped spray, longitudinally in all directions (to and fro—simultaneously), upward to bathe the top, front, and back, while, by a slight rotary motion, the sides of the vomica would receive thorough treatment, the fluid accumulating from the spray on the walls above, flowing down to medicate its base.

The next point to which I invite attention is the question of

---

\* See Fig. 1. Since it was engraved, I have devised an automatic cut-off attachment to the spray apparatus, to be conveniently controlled by the operator, thus dispensing with the hand which it substitutes at the air receiver outlet.

† A bright-looking granger, with an evident predilection for humor, after examining the apparatus critically, remarked: "Pardner, you are going to cure consumption now; you have found out the tools with which to tackle it where it roosts."



\* FIG. 1.—(A) Air Pump and Engine. (B) Air Receiver. (C) Pressure Gauge. (D) Fluid or Medicine Holder. (E) Perforated Cannular Spray Needle. (F) Fan-shaped Spray.

FIGS. 2 and 3.—Divergent and Right-angled Spray Apparatus for broncho-tracheal and subglottic medication *via* crico-thyroid membrane.

F [PATENT PENDING.]

FIG. 1.

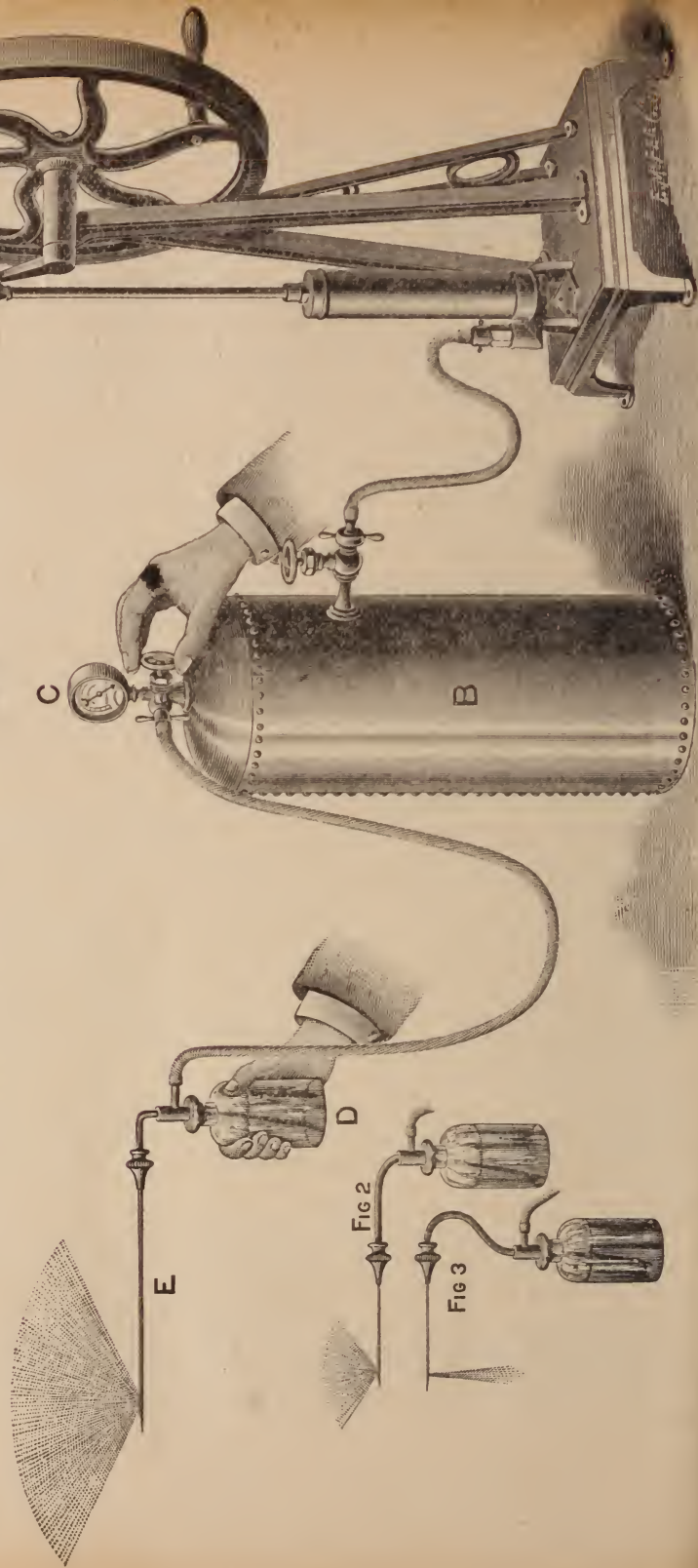


Fig. 4.



Fig. 4 shows the instrument and spray introduced into a lung cavity.

#### PULMONARY TOLERANCE.

Notwithstanding the sophistic allegation that the lungs, when once affected, can not be cured, or "reached by medicines,"\* the following well-authenticated facts and observations show that the pulmonary, like the other structures of the body, are not unfrequently remarkably tolerant

---

\* To a thinker, who understands physiology, the stomachic *direct* medication of diseased lungs is as plain as a map. And the fact that cod-liver oil is one of the most valuable as well as most frequently used medicaments in the treatment of chronic diseases of the lungs, suggests the quoting of the following physiological observation upon the

#### INTESTINAL ABSORPTION OF FATTY SUBSTANCES.

Dr. John C. Dalton, of New York, one of the very distinguished and most highly appreciated of living physiologists, says: "While intestinal absorption is going on, after a meal containing fatty ingredients, the lacteals may be seen as white, opaque vessels, distended with milky chyle, passing through the mysentery, and converging from its intestinal border, toward the receptaculum chyli, near the spinal column. . . . The lacteals then conduct the chyle to the receptaculum chyli, whence it passes upward

through the thoracic duct, and is finally discharged, at the termination of this canal, into the left subclavian vein. It is then mingled with the returning current of venous blood, and passes into the right cavities of the heart.

The presence of chyle in the lacteals is, therefore, not a constant, but only a periodical phenomenon. The fatty substances constituting the chyle begin to be absorbed during the process of digestion, as soon as they have been disintegrated and emulsified by the action of the intestinal fluids. As digestion proceeds, they accumulate in larger quantity, and gradually fill the whole lacteal system and the thoracic duct. As they are discharged into the subclavian vein, and mingled with the blood, they can still be distinguished in the circulating fluid, as a mixture of oily molecules, between the orifice of the thoracic duct and the right side of the heart; [*italics ours*] *while passing through the lungs* [which they do *immediately* after leaving the right side of the heart], however, they become altered in character, as above described, and lose, for the most part, the distinguishing characteristics of oily matter *before they have passed beyond the pulmonary circulation*. The fatty substances thus introduced by the blood-vessels and the lacteals, are in this way rapidly transformed and assimilated to the ordinary ingredients of blood." See *Dalton's Human Physiology*, 5th edition, 1871, pp. 158 and 159.

All clinical observers are familiar with the emollient or soothing influence of oily substances when applied locally to irritable or inflamed parts of the exterior of the body. Other lexicographers and therapeutists concur essentially in this definition from *Quain's Dictionary*, 1883, p. 436: "Emollients relieve the tension and pain of inflamed parts by their action both upon the blood-vessels and upon the tissues themselves. They cause all the contractile tissues to relax and dilate, and thus, lessening pressure upon the nerves of the part, they relieve pain. They soften superficial parts by supplying them with either fat or moisture, and by increasing the supply of blood."

Thus does cod-liver oil, taken during primary digestion, and subjected to the emulsionizing influence of the pancreatic secretion, and the bile, which imparts to it increased facility of absorption, pass from the interior of the bowels through their sponge-like lacteals, receptaculum chyli, thoracic duct, and short venous course before mentioned, to the right ventricle of the heart: thence through the minute ramifications of the pulmonary arteries to every part of the lungs, there exerting, *locally*, its emollient or soothing and healing influence upon the irritable pulmonary tissues, besides penetrating their structure as it does that of leather—softening and "thawing out" as it were, preparatory to expulsion by either absorption and elimination, or expectoration of the offending tubercular and phthioplasic deposits—the *materies morbi* of consumption.

A striking illustration of this penetrative quality of cod-liver oil is furnished by Drs. C. J. B. and Charles T. Williams, the great English physicians, of the Hospital for Consumption, Brompton: "The wonderful penetrative power of cod-liver oil, on animal tissues, has long caused it to be used in the leather trade, and proofs of this action, in the living body, occur in the smell of the oil being occasionally detected when scrofulous abscesses are opened, after the patients have been taking it for some time previously."—*Williams on Pulmonary Consumption*, 1871, p. 352.

I have had opportunity to make this observation in a number of instances.

While cod-liver oil thus reaches and acts *locally* upon the lungs, besides improving nutrition, and performing its "necessary office in the evolution of force" (Bartholow), numerous other medicines, of course, reach them through the same channel and produce their specific effects. I mention cod-liver oil in particular because its employment as a remedial agent in cases of weak and diseased lungs is so generally known.



of injury, the result of disease or accident, and have great recuperative power in persons of naturally good vitality and previous good habits.

I have already mentioned a number of skillful men who have demonstrated this tolerance by safely and advantageously injecting fluid medicines into lung cavities. Still greater instances of it are beautifully illustrated by Figures 5, 6, 7 and 8.

*Fig. 5.*

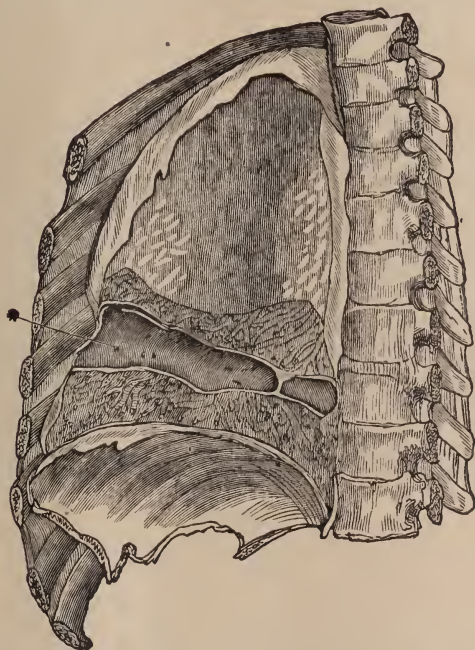


Fig. 5 shows the track of the ball in a gun-shot wound through the right lung perfectly healed and lined with firm scar-tissue. Taken from a preparation in the Army Medical Museum, at Netley. (See Holmes' System of Surgery, by Packard, 1882, Vol. iii., pp. 490 and 491.)

"A man, aged fifty, died on the seventh day of an attack of typhoid fever. . Fourteen years before he had been treated in the same hospital. At that time he had infiltration of the right apex, extending down to the third rib, hæmoptysis, etc. From this attack he entirely recovered [see specimen of healed pulmonary consumption, Fig. 6,] followed his business, and during the years just before his death enjoyed excellent health, without any further indica-



tions of lung trouble."—*Dr. George Edward Rindfleisch, in Ziemssen's Cyclopædia of the Practice of Medicine, 1875, Vol. v., p. 684.*

Figures 7 and 8 are contained in Watson's Practice of Physic, 5th edition, 1872, Vol. II., p. 220; Jones and Sieveking's Pathological Anatomy, 1875, p. 505; Gross' Pathological Anatomy, 3d edition, 1857, pp. 433 and 434; and numerous other treatises on practice and pathological anatomy, which should be carefully studied and mastered

*Fig. 6. .*



Fig. 6. Section through a specimen of "Healed Pulmonary Tuberculosis."

by men pretending to speak authoritatively, before pronouncing all such cases necessarily, and inevitably, incurable.

*Apropos* to the question of pulmonary tolerance, I quote here the following observations in regard to

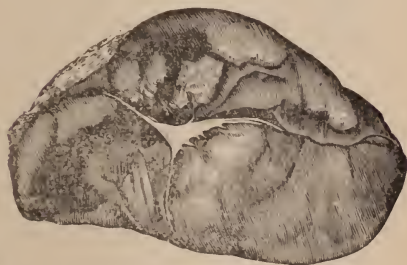
#### "EXTIRPATION OF THE LUNG.

"Dr. Domenico Biondi, of Naples, some time since proved that animals recovered after removal, by operation, of one entire lung. In a more recent communication, published in the *Wiener Medizinische Jahrbücher*, the same physician shows that animals may survive the removal of portions of lung artificially infected with tubercle. After injecting, by Ehrlich's method, masses of bacillus tuberculosis into the parenchyma of the lung, so that the clinical and anatomical symptoms of tubercle were produced, he re-

Fig. 7.



Fig. 8.



Figs. 7 and 8 represent specimens of arrested consumption of the lungs; the former, an internal section of the summit of the left lung, showing a large cavity, the result of tubercular consumption, cured and lined with scar or cicatricial tissue: the latter, a "Cicatrix at the apex of a lung, resulting from the previous arrest of tubercular disease."

moved, at the end of a few weeks, the diseased lungs; and in all cases recovery was complete. . . . Bearing in mind the surgical procedures performed with success in this country, that were once considered impossible, and then unjustifiable, it is hardly unreasonable to believe that excision of the lung is an operation of the distant, if not of the immediate future."—*British Medical Journal* quoted in *Cincinnati Medical News* of March, 1886, p. 200.

Suif reports a case in which he "cut away from a man two of his ribs, making an opening into his chest capable of admitting the fist, and of the removal, with complete success, of a portion of diseased lung."—(See *Gross' Surgery*, Sixth Edition 1882, Vol. 2, p. 1072.)

The following interesting and successfully treated case of abscess of right lung is recorded by Dr. W. S. Cline, of Tom's Brook, Va. :

"In 1866, I was called to see a consumptive patient of my brother's, and found an abscess, as I thought, between the sixth and seventh ribs. I opened it and over one pint of pus escaped, with no signs of abatement; I called for some lint with which to stop the flow, got on my horse and rode to consult my brother, telling him I had struck a fountain of 'matter.' When he arrived, we pulled out the plugs and over a half a gallon [*sic.*] more pus escaped. Our patient made a rapid recovery and is living to-day, minus his right lung. His body inclines to the right and that shoulder is lower."—*Med. World*, June, 1886.

A most extraordinary case of this kind is recorded by Dr. Milton Antony, formerly of Augusta, Ga., who was called in consultation with Dr. Jno. Pugsley, then of Jefferson County, Ga., in the *Philadelphia Journal of the Medical and Physical Sciences*, Vol. VI. 1823, pp. 108 to 118.

On the 3d of March, 1821, the physicians above mentioned visited Elmon Allen, aged seventeen years, who presented substantially the following history: "Between two and three years before, he had, by a fall from his horse, received a injury on the right side, whereby the sixth rib was believed to have been fractured. . . . The local irritation and ecchymosis, measurably, though not entirely abated, and, during the two years next following, he was frequently able to walk or ride without serious inconvenience. Several times, however, during this period, he was, in consequence of irritation and tumefaction produced in the injured part by overexertion or accident, forced to keep his bed for days, and sometimes for weeks. Such at one period was the inflammation that a blister was raised on the part. Thus the case proceeded until about the end of 1820, when the pain in the part became distressing. Soon after this a pungent and extremely severe pain was fixed at the vertebral and sternal articulations of the injured rib. So great was the local irritation that a constitutional disturbance was excited, and a fever of hectic type ensued. This continued with severe pains at the extremities of the sixth rib, with a *cessation of pain in the wound*, which was followed by an *unpleasant feeling of weight and distension*. About this time it was observed that there was little or no motion in the right side of the thorax in respiration. . . . I found the patient in good spirits, though considerably emaciated, and had not rested at night for some length of time without laudanum. Respiration was laborious, with much

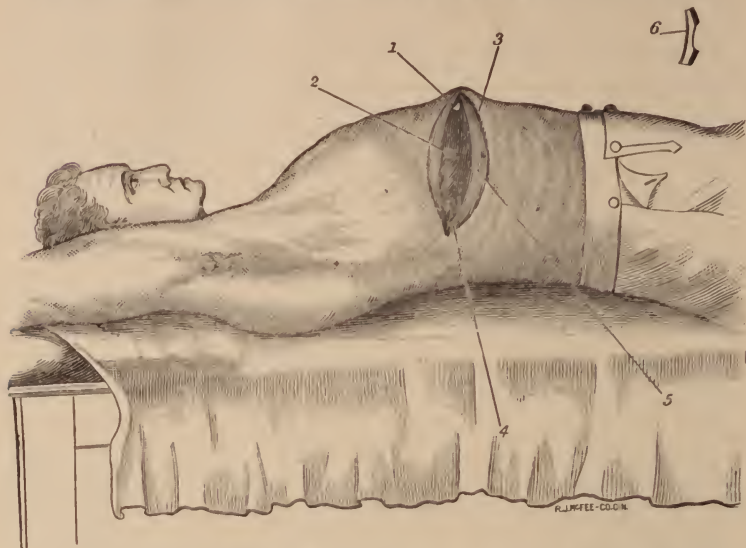


exertion and dilatation of the nostrils at each inspiration. . . . No more respiratory motion was perceptible in the right side than appeared to be the effect of the repeated inflation of the left lobe [lung] [p. 109], and consequent motion of the parieties of the left side, to which the parieties of the right were attached. . . . The tumefaction of the part was in the direction of the ribs, extending from the sternum to the anterior edge of the latissimus dorsi—about two inches in width and one in height at the most elevated point, which was several inches immediately over the injured part of the sixth rib. The skin covering the tumor was entire and without discoloration or change of appearance, except a slight enlargement of the superficial vessels. . . . I commenced my incision at the sternum and extended it freely through the super-incumbent integuments, immediately over the space between the fifth and sixth ribs, down to the lower end of the tumor. . . . A copious discharge followed, not of pus, for not a particle of purulent matter was observed, but a kind of grume and old red coagula intermixed with dense coagula of lymph, resembling irregular fragments of membranes [p. 110]. . . . Having detached those [carious] portions of the fifth and sixth ribs, and my opening through the bony structure of the side being free, I proceeded to remove the grumous and coagulated matter within the ribs [p. 111]. . . . I immediately determined on making an examination, with my fingers, for the lungs, by penetrating as deep into the substance beneath as I could without resistance, . . . and to my utter astonishment and mortification, I was able to *penetrate the right cavity of the thorax, with my first and second fingers, in every direction* to the full depth of three and a half inches, without any resistance, more than the pulpy substance before described was calculated to give, except occasionally meeting with more or less disorganized fragments of *bronchial tubes*, all of which tended plainly to prove to me that *the substance of the right lobe [lung] was extensively destroyed* [p. 111.] . . . I will here observe that in this examination *no respiratory motion was perceptible to the fingers*. One minute's reflection dictated to me the only course which could possibly be pursued, and which I immediately adopted. It was, carefully to take away, with my fingers, all the parts within my reach, which were removable without violence or the danger of producing hemorrhage in the event of my reaching near any sound vessel. The result of this was the



**Fig. 9.\***

## EXCISION OF PORTIONS OF THE FIFTH AND SIXTH RIBS.



1—The sternal fragment of the fifth rib. 2 Its vertical fragment. 3—The sternal articulation of the sixth rib. 4—Vertical fragment of the sixth rib. 5—Retracted cut edge of the wound. 6—Represents the removed fragment of the fifth rib.

removal of all the disorganized parenchyma of the lungs within the reach of my fingers (judged to be between one and two pounds' [*sic.*] in weight), carefully cleansing it from between and around several of the branches of the bronchial tubes, which appeared to have retained their texture with more tenacity than their surrounding parts. . . . .

I then cleansed the wound carefully, which had the appearance represented in the annexed plate [see Fig. 9], introducing large pledgets of lint between the cut edges (which were themselves considerably retracted), for the purpose of keeping the opening as free as possible for the exit of offensive matter. The dressing was finished by covering the wound with a plaster, and applying a roller so tightly as to prevent the motion of the ribs, causing respiration to be performed by the diaphragm chiefly [p. 112]. . . . .

On the ninth day I received information that he was considerably better; that the discharge from the wound had, since

\*Engraved by R. J. McFEE & Co., an obliging and reliable firm of Cincinnati artists.

my visit on the fourth, been much more free, and that there was *perceptible respiratory motion in the right side [italics ours]*. On the eleventh day I was informed by letter, that the symptoms were generally favorable: the wound looked well, mattered freely, slight fever every day, appetite pretty good, has an alvine evacuation daily without medicine [p. 113]. . . . April 24th [p. 115], the patient remains easy and has continued to mend to the present time. Respiratory motion is as free in the right as the left side, as far as the fifth rib, below which there is not the least appearance of it."

"On the 6th of May [sixty-four days after the operation] I again visited the patient. His general symptoms were still better. He had, at that time, so far recovered and improved in health as to possess all the *fullness of habit* of his ordinary state. His strength had so far returned as to enable him to exercise on foot freely about the yard, and he felt able and desirous of walking to some place in the neighborhood, half a mile distant, but was not allowed to exceed the limits of the yard. In short, he was able to sit and walk about the house and yard, twelve hours out of twenty-four, with much facility" [p. 115].

In his "sequel" to this most interesting and remarkable case, Dr. Antony states [p. 118] that shortly after his last visit to the patient, in May, "he went out some two or three miles to church; and, soon after this, I was informed that he had taken the measles, from which it was believed he had recovered, though his general health was left impaired, and in which state it continued, gradually becoming worse, until the 11th of July, on which day he died."

Whether or not this patient would have recovered (which he certainly bid very fair to do) had it not been for the attack of measles (which, as an intercurrent complication in such a case, would not be otherwise than extremely dangerous) we can not, of course, determine. I reproduce this account of it, condensed as much as possible, as going far to show that, in some cases, there is a greater degree of pulmonary tolerance than is generally supposed.

Most physicians of considerable practice have doubtless had occasionally vexatious cases of bronchial, diphtheritic, inflammatory, some syphilitic, and other diseases of the sublaryngeal air passages in which the results of all forms of treatment available were far from satisfactory. With, however, the single and fan-shaped spray apparatus which I

propose, delineated in the abstract by Figures 2 and 3, and operating *in situ via* the crico-thyroid membrane in

*Fig. 10,*

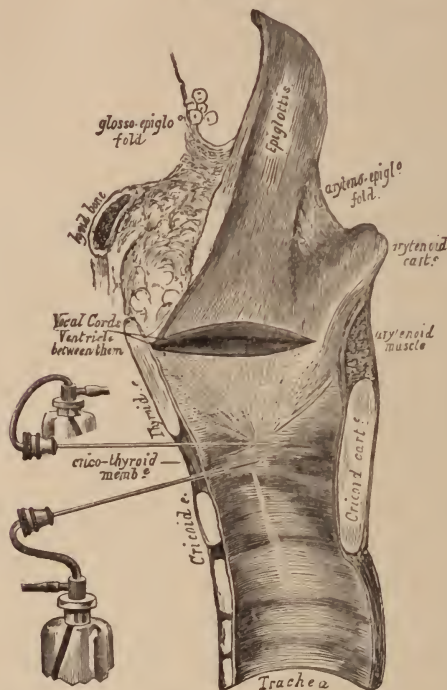


Fig.10 shows the broncho-tracheal and subglottic spray apparatus (also figures 2 and 3)—which may be turned to spray in any direction—inserted through the crico-thyroid membrane, and spraying down towards the bronchia, and up against the under surface of the vocal cords.

I believe many of these cases may be directly medicated, easily, safely, advantageously, and with precision.

As this article is already considerably longer than I had anticipated, I will forego, at present, any extended discussion of the various medicinal agents that may be employed in this way, reserving any remarks which I may have to offer upon

#### RESPIRATORY THERAPEUTICS

for an article in the future. I will, however, task the forbearance of the reader a little further, in order to suggest to those who may have an opportunity to determine their

practical value, the experimental laboratory observations of Korab, who claims for

# HELENIN

“a power of destroying bacilli, and especially those of tubercle.” (See Stillé and Maisch’s Dispensatory, Third Edition, 1884, p. 825; Bull. de Thérap., CIII. 271; and Brunton’s Pharmacology, Therapeutics, and Materia Medica, 1885, p. 813.) If they are correct, this agent may prove to be a valuable local adjuvant to the constitutional and other treatment of consumption.

In conclusion, I would remark that I offer these devices to the studious, progressive element of the medical profession, for whatever future experience may prove them to be worth, regretting that I have not so far had opportunity to thoroughly determine their practical value. Of course, such radical innovations, although having in their favor undisputably the arguments of safety and practicability, can seldom be introduced into practice elsewhere than in public hospitals. There the poor charity patients are quite favorably and wonderfully impressed by the wielder of the (to them) extraordinary instrumental appliances, acquiescing readily in their use, as they fancy how little the “common doctors” outside know about such things. And it is largely through these humble unfortunates (usually to their own decided physical advantage), that the middle and wealthier classes (who in their own cases will not tolerate the use of untried novelties) have to be made familiar with and reconciled to the employment of whatever remarkable new procedures are devised and introduced into practice.

I must therefore be contented for the present with placing these inventions before those of my more favored professional brethren whose social predilection and preferment, with influential affiliations, render them allegedly “available” for hospital and professorial positions, hoping at least that the opportunities afforded for their application may be successfully improved in the not very distant future.

FOR TOOTHACHE.—Spermaceti or white wax 2 parts, chloral 2 parts, carbolic acid 1 part. Melt the wax, and add the chloral and carbolic acid while stirring. Dip pieces of wadding in the mixture while fluid. They become solid on cooling. When used these are warmed and placed in the hollow tooth.—*Journal de Med. de Paris*.



## Nasal Catarrh.

*Otherwise Designated as Nasal Pharyngeal Catarrh, Post Nasal Catarrh, Naso-Pharyngeal Catarrh, Glandular Hypertrophy of the Vault of the Pharynx, Hypertrophic Nasal Catarrh, Ozæna Rhinitis, etc.*

---

BY A. W. NICHOLS, M. D., GREENVILLE.

---

Read before the Michigan State Medical Society.

It is not the object of the writer to assume the rôle of the specialist, but as few diseases are more often brought to the attention of the general practitioner for his advice and prescription than this, it would seem eminently necessary that he have a comprehensive knowledge of its etiology, pathology, diagnosis and treatment.

Excluding such forms of nasal catarrh as are known as adenoma, excessive hypertrophy of the turbinated bones, deflection and perforation of the septum, which are diseases belonging more properly to the specialist. First, then, what is nasal catarrh? Second, what are its effects? Third, what is the treatment? Nasal catarrh more properly is a symptom of disease. But, as indicated above, we shall omit a consideration of those structural changes which are productive of chronic nasal catarrh, viz.: Adenoma, excessive hypertrophy of the turbinated bones, deflection and perforation of the septum, etc. Without entering into an anatomical division of the nasal cavity or the region involved (for this can be obtained by an examination of Gray), we may state briefly that the parts involved are the mucous membranes lining the upper air passages extending from the anterior portion of the nostrils to the border of the soft palate posteriorly. Acute nasal catarrh (as we shall discuss it to-day) arises from acute inflammation of the nasal membrane, which often extends into the lachrymal duct and Eustachian tube. Among the many prominent causes none are more prolific than exposure to cold and damp atmosphere, especially during the fall and winter months, which often produces coryza or acute inflammation of the Schneiderian membrane, and if allowed to exist long, or is frequently repeated, induces chronic nasal catarrh. It is generally a sporadic disease, and as stated, usually arising from exposure to a damp atmosphere with rapid changes of temperature at a time and under circumstances when people are

apt to be subjected to sudden exposures to cold and heat. Acute forms of the disease may arise from measles, scarlatina, facial erysipelas, inhalations of irritating dust and vapors.

But perhaps the most common cause is from catching cold from neglect of the proper use of wraps, especially in neglecting the feet by irregularly wearing overshoes during the seasons mentioned. Syphilitic taint and a strumous diathesis are well-known causes. Some children seem to be subject to catarrh, as all practitioners are aware, and in many instances the disease in such is of a persistent and intractable character.

Herpetic and eczematous eruptions are frequent causes, as noticed by Dr. E. L. Shurley in a paper before the Society in 1878. The pathological processes which constitute the disease are, as in other membranes, first, irritation; second, congestion and swelling of the mucous membrane, the changes usually beginning in the anterior portion of the nose and extending posteriorly; or, as is sometimes the case, pharyngeal inflammations may extend up into the nasal cavities. During the stage of acute inflammation there is excessive cell proliferation and glandular secretion, attended with a highly diluted and excessive mucous discharge, which soon becomes muco-purulent in character. The nasal membrane is greatly swollen, and on anterior inspection and posterior rhinoscopy, the mucous membrane presents a reddened, puffed or patulous condition. Soon this takes on a hypertrophic form; the functions of the membrane become more changed, the mucus of greater consistency, which in some cases rapidly dries, leaving large, dry and blood-stained crusts, often requiring considerable effort for their removal. If these masses continue long *in situ*, the muco-purulent secretion underneath them is locked up and becomes purulent, giving rise to a fœtid odor and a pathological state known as ozæna, which is so deleterious and offensive to the sufferer and intolerable to those with whom he comes in contact. The treatment of nasal catarrh has been by the general practitioner too much neglected, and on that account those afflicted with the disease have too frequently fallen into the hands of charlatans, patent medicine manufacturers and vendors, to whom it has been an astonishing source of revenue, while the sufferers have been but little, if any, benefited, and usually injured, if from no other reason than neglected treatment.

Quacks make very little pretensions to surgical and obstetric practice, for the reason that the profession are awake to the requirements necessary in the management of these departments of our calling. No diseases can be successfully treated without first making a clear and comprehensive diagnosis, and especially is this true with reference to diseases of the nasal passages. It would be impossible, for instance, to differentiate the cause of nasal catarrh, resulting from adenomatous growths from an attack of the disease resulting from ordinary hypertrophy of the nasal membrane, except by direct inspection of the nasal cavity. Happily we have at our hand instruments of reflection and refraction which render such inspection possible. Doubtless the apparent indifference among the profession to successfully treat this disease in the past has arisen from the fact they have not availed themselves of the means of rhinoscopy. The instruments we have at hand for examining the throat and nose are so simple, and their application so easy, that it would appear that every physician should acquaint himself with their use. In the prosecution of the treatment the physician should secure a head mirror, a good one being Bosworth's head-band and mirror; a No. 2, 3 and 4 laryngeal mirror, a tongue spatula, and a nasal speculum, a very excellent and convenient one being Bosworth's. With this set of instruments, an ordinary gas-jet, or better yet, a good sun ray of light, will suffice to enable him to make a thorough examination of the nasal cavity. If he find on examination a muco-purulent discharge, he should at once cleanse the parts thoroughly by throwing in an alkaline solution, such as is commonly used in dispensary practice, viz., (Dobell's solution):

R.	Acidi carbolici,	.	.	.	gr. viij.
	Sodæ bicarb,	.	.	.	grs. xx.
	Sodæ bi borat,	.	.	.	grs. xi.
	Glycerinæ,	.	.	.	℥j.
	Aquæ dist. q. s. ad.,	.	.	.	℥ viij.

M.

Formerly the nasal douche was relied upon to wash out the nasal cavity, but it has been found very inadequate for that purpose. Again, the atomizer was expected to accomplish the purpose, but *it*, also, was found to be insufficient when the mucus or muco-pus was tenacious. However, in ordinary cases it answers the purpose admir-

ably, as by its use we are enabled to wash out the entire nasal cavity. In case the atomizer is not sufficient for the purpose indicated, we have a very convenient and efficient instrument in the post-nasal syringe, which is easily manipulated. Some time since the theory was advanced that the use of the douche and post-nasal syringe might cause inflammation of the Eustachian tube and middle ear; but we believe that to-day specialists agree that the use of them does not produce such results, while on the other hand we meet daily persons who are partially deaf as a result of a neglected nasal catarrh. After the cavity has been cleansed, we come to the consideration of further steps in the treatment. It is generally conceded, we take it, that the treatment should be by direct application to the diseased membrane, as internal medication has little, if any, influence in promoting the absorption and restoring the nasal enlargements or hypertrophies to their normal condition, except in so far as is necessary to correct any constitutional taints. Generally in mild cases of hypertrophy, the nasal membrane can be restored to its normal condition by the direct application of topical agents, either in the form of atomization or powders. The most convenient form of vapor applications is by means of the atomizer. Among the large number placed on the market there is this objection to nearly all, if not all, that they are so apt to become useless by the tube becoming impervious, except Sass' spray tubes, which are expensive and easily broken. But these difficulties we must endure until better ones are devised. Dispensary physicians and specialists use an air-pump and receiver, to which is attached the Sass tube. The advantage of the air-condenser can not be overestimated, as the force of the spray is great enough to wash out the mucous accumulations and enables the medicated spray to reach the sinous cavities of the nose. But to prevent catarrhal developments after an attack of coryza, resulting from catching cold, should engage the attention of the physician, if he be consulted at that stage of the disease. Prophylactic measures are as essential in preventing chronic rhinitis as in any other known disease. To break a severe cold, before the secreting stage is established, and before the pathological changes ensue, is of the greatest importance. Quinine, the bromides and opiates are well-known agents to meet these indications; and to further promote secretion and allay irritation the following may be used:



R. Acidi hydrocyanic dil., . . . . . 3 i.  
 Tincture cubebæ, . . . . . 3 ss.  
 Glycerinæ q. s. ad., . . . . . 3 iv.

M. S. One teaspoonful four or five times daily.

In the early stage, hot vapors prove of great service in promoting secretion and allaying congestion; and among the many remedies used, perhaps the most convenient and beneficial are the fumes from slaking lime. The fœtor often noticeable after the second or third day of an attack of acute coryza, may be corrected by atomization of Dobell's solution. And to still further aid the processes of absorption, and to render the patient less liable to repeated attacks, administer iodide of potassium and iron during a period of several weeks, or until recovery is established. After the nasal cavity has been thoroughly cleansed, washing out the mucus and incrustations as before stated, we next come to the consideration of the means necessary and the remedies required to restore the atrophic and hypertrophic mucous membrane, as far as may be, to its normal condition. For this purpose astringent or resolvent topical agents are indicated, and at the head of remedial astringents sulphate of zinc has the preference, the solution being grs. 3 or 5 to the oz., and is applied with the atomizer, using only as much as necessary to bathe the parts. The writer has enjoyed very excellent results in the use of this agent, and in no instance has there appeared any intolerance upon the part of the patient in the use of the drug; but should the application cause pain or irritation, the solution should be diluted, and it would also be well to add morphine, grs. 3 or 4 to the oz. Chloride of zinc and nitrate of silver are enumerated in the remedial agents employed. To promote secretion and correct fœtor, Gottstein, in 1881, advocated the application of the cotton tampon, filling well the space between the turbinated bones and the septum, allowing it to remain twenty-four hours each application. Prof. Bosworth is of the opinion that the same or better results may be obtained by the use of powdered galanga or sanguinaria applied by means of Smith's insufflator. "By their action a flow of mucus is excited which not only supplies the deficient moisture to the membrane, but also does more; it seems to flush all the conduits of the membrane, as it were, and washes out the worn-out detritus, cleanses the glands of their exfoliated epithelium and restores a healthier action to the diseased secreting apparatus."

Direct application of acetic acid to the hypertrophic nasal membrane is of special value. Chromic acid, which is a powerful escharotic, has also been recommended and used for many years; but of late it is becoming a very popular remedy. The galvano-cautery has for a few years been extensively used in the destruction of hypertrophic tissue within the nasal cavity. It is, however, a dangerous instrument, and much less popular than heretofore.

The use of the nasal forceps in removing hypertrophied tissue is painful, and may be productive of harmful results. Bosworth's modification of the Jarvis snare is the preferable mechanical appliance in cases where the hypertrophied membrane is largely developed and the nasal cavity is impinged upon and chemical agents prove insufficient.

At the last meeting of the American Medical Association a majority of the members present at the section on laryngology appeared to be of the impression that little, if any, benefit could be derived from a change of climate for nasal catarrh, although it was advocated by some that the climates of Minnesota and Dakota have a very salutary effect upon mild cases of a non-hypertrophic character.

---

### Translations from Our Foreign Exchanges.

---

Translated for MEDICAL NEWS, from the French, by Dr. Illowy,  
Cincinnati, Ohio.

---

#### THE NEW METHOD OF PROFESSOR VULLIET OF DILATING THE UTERINE CAVITY SO AS TO PERMIT OF OCULAR INSPECTION—BY BERTRIX,

Chief of the Clinic of the Maternity at Geneva.

At the meeting of the *Medical Society of Geneva*, of October, Professor Vulliet read a paper concerning his method of continuous progressive dilatation of the uterine cavity, a method he had inaugurated in his private practice, and which he had frequently employed in his gynecological service at the Maternity during the months of July, August, September and October, 1885.

Having had the advantage of acting as assistant of this service during this epoch, I desire, with the amiable authorization of Professor Vulliet, to give some details of the methods of procedure of this progressive dilatation and of the results obtained.

The object of this method is to render visible the internal walls of the uterus in their whole extent, to inspect the uterine cavity to the minutest uterine fold, and all this to the naked eye without the aid of any special optical instruments, the light of the sun or the first lamp to hand furnishing sufficient illumination. Once the uterine cavity is open and dilated, it is possible to carry in, no matter to what part of its parieties, any instruments desired, bistouri, curette, hot iron, energetic caustic, with as much facility and precision as is done on any exposed part. It was due to this complete dilatation that it was possible to show Professor Schiff a uterus in a state of menstruation. The blood was seen flowing from the wall in the form of a very fine capillary hemorrhage; it was a true sickering, very slow and very regular. The idea immediately came to give the impression of these dilated cavities by demonstrative and indisputable proofs by photographs and casts.

Professor Gosse, who has taken such great advantage of photography in his demonstrations of legal medicine, had the kindness to make several essays, and finally obtained, in fact, several proofs, which, without being very clear, are still sufficiently comprehensible to persons who have seen these cavities themselves. The first reproductions were made in the lecture-room of the Maternity, an apartment very poorly lighted; they were obtained by illuminating the uterine cavity with a simple mirror reflecting the sunlight. Other proofs were made by a photographer of our city with a more suitable apparatus and in a place better supplied with light. They are very clear, but will not be comprehended unless placed beside the casts of these cavities, and are insufficient to illustrate and to complete a description or a scientific work.

There are some special difficulties in the way of this reproduction; firstly, the deep red or roseated color of the walls is not the most favorable for photography; further, the uterine cavity following immediately that of the vagina, and the united cavities forming a sort of long and narrow canal, the absence of different planes makes it impossible to reproduce the perspective, whence there results a flat image without any clear indication of depth. And where everything is on the same plane, even if a tampon is placed at the bottom to indicate the cavity, still the image is not very demonstrative.

The casts of these cavities have succeeded much better;

whether caoutchouc or plaster be used, we have succeeded in obtaining excellent reproductions. Unfortunately the applications of the plaster, and especially the extraction of the hardened cast are painful, and we were for these reasons not able to apply it to all cavities.

Dr. Vulliet presented these photographs and casts to the medical society, with the patient whose cavity was reproduced in plaster, and every one present could convince himself of the exactitude and absolute conformity of the model and of the reproduction; this latter showing all the asperities, all the minutest details of the surface of the walls, among others an old tear of the uterine neck, in a most remarkably clear fashion.

As to the dilatation itself, this is the method of *procéduré*:

The position to be given to the patient is of capital importance. The most preferable one, I would even say indispensable, is that of Bozeman, or the genu-pectoral position, the seat being very much elevated and in face of the light, the loins very much bent, forming a veritable saddle-back. The first few times it is very difficult for the patient; but with a little good will and patience she soon becomes accustomed to the position and will take it herself in a most exact manner. The woman should also be instructed how to carry the buttocks to the right or left by moving the head and chest so that the different parts of the cavity may be alternately illuminated by the light and rendered perfectly visible. The perineum must be strongly elevated by a Sims speculum, as large a one as possible.

In cases where the pathological process, that necessitates or justifies the dilatation, has not yet opened up the cervix more or less high, the dilatation will be commenced by introducing into it the instrument which will penetrate it most easily; uterine sound, urethral bougie, sound for intra-uterine injection, branched dilators, etc.; whatever is at hand can be used, augmenting the volume of the instrument little by little, and choosing for each particular case that instrument which will best adapt itself to the dimensions and tortuous or straight form of the cervical canal. A certain degree of dilatation having been once obtained, the process becomes the same as when the cervix is already normally or pathologically dilated; that is to say, it is now when the intra-uterine iodoformed tampon comes into action.

These cotton tampons have dimensions that vary from the size of a large pea to that of an almond. A double



thread is attached to them in the middle; they are prepared by plunging them into a ten per cent. ethereal solution of iodoform, and drying them quickly by rapid agitation in the air; they are then preserved in a well-stoppered bottle.

The method of introducing them is as follows: they are carried to the entrance of the orifice by means of very long and fine dressing forceps, curved or with an elbow; thence they are pushed little by little into the uterine cavity with a resistant metallic bougie having the curvature and volume of the sound for intra uterine injections. The tampon should pass the internal orifice and penetrate completely into the cavity.

The strings attached to the tampon being outside of the vulva, they can be united by tying them all into one knot, and in this way it will be easier to remove them in order to change them, or to withdraw them into the vagina if they should inconvenience the patient too much.

Thus at the first sitting we may introduce three or four, or even more of these tampons; they are allowed to remain for twenty-four, or even forty-eight hours. At the end of this time the tampons are withdrawn, the cavity is washed out if it appears necessary so to do, and they are immediately replaced by others, and by a greater number, a number *which should be augmented at every sitting*; and the cavity must not remain completely vacant if we do not want to lose the vantage gained.

Generally the uterus will show a great tolerance for these tampons. Ordinarily they cause no disturbance at all; sometimes, however, colics may be excited, but only at the outset of the dilatation, and they are of short duration. In one of his patients Professor Vulliet observed nausea to supervene analogous to that observed at the outset of pregnancy. After the first sitting there is sometimes observed a slight elevation of temperature, but this does not last longer than one or two days. I have never observed chills.

If from some cause or other it should become necessary to hasten the beginning of the dilatation to get more rapidly over the first stages, the following method can be followed: After having employed for a day or two the iodoformed tampons, profiting from this that the uterus is in a state of perfect asepsy, we then introduce the expansible disinfected bougies (preferably a bundle of three or four laminaria). After twenty-four hours these are removed, the cavity

washed with a sublimated solution and the cotton iodoform tampons again introduced.

The laminaria have this advantage over the cotton tampons, that they enable us to pass rapidly the first period of the dilatation process, and that they bring about an expansion regular in caliber; they are well suited for rapid dilatation. On the other hand, they occasion a traumatism, are much more difficult of toleration by the patient than the cotton ones, are frequently intolerable; they often expose the patients to grave accidents, and then it is impossible to have the sticks completely aseptic. I can say as much of the prepared sponges, because they have the same inconveniences. It is therefore necessary, if they have been employed, to wash out the cavity most carefully with an energetic antiseptic, preferably a solution of sublimate, 1 to 1,000.

For slow dilatation the cotton tampons will suffice and constitute a much more anodyne method. If they prove too slow or too irregular, the laminaria can be used at one sitting with an observance of the necessary precautions.

Thus the uterine cavity is sealed like a dentist seals up a hollow tooth; the cavity yields, distends little by little and we take possession of the space gained by augmenting continually the number of the tampons until the dilatation be such that when the cotton is withdrawn and the air fills the cavity, the sight can inspect the whole extent of the walls and penetrate to the very fundus of the uterus. The cavity of the latter, and that of the vagina should seem to form one continuous canal.

It may happen that in a certain case the external orifice resist, and that the dilatation be more pronounced in the interior than at the orifice of the neck; this would naturally render inspection impossible; this resistance can be overcome by means of a very large tampon of conical form; this is introduced into the cavity in such a way that the base of the cone does not penetrate entirely into the uterine orifice. When the dilatation is completely and regularly established, the cervix is effaced, and if it be not hypertrophied, it does not form more than a very slight projection, which is not the least obstacle to the inspection of the cavity.

Professor Vulliet has not applied his method unless it was necessary and for the benefit of the patient, believing that we should abstain from all experiments which have no

other purpose than to show the skill of the operator. When the introduction of the curette or of the finger sufficed for the treatment, the dilatation was not pushed beyond the degree necessary.

In accordance with this principle, Professor Vulliet has not, up to the present day, applied his method except to many cases of cancer of the uterus, to three cases of intra-parietal fibrous polyps which projected into the uterus; to two voluminous fibro-miomata, and to one or two cases of endometritis.

As to the time required for the complete dilatation, it varies in different patients according to the state of the uterus and the degree of resistance of the cervix; thus, for instance, in the case of one cancerous patient in whom the dilatation was begun on the 7th, the whole cavity was clearly visible on the 16th of the same month; in another patient the process required twenty days. On the other hand, in the case of a fibrous polyp, the whole cavity with the tumor projecting into its interior was clearly visible on the third day. In those of Professor Vulliet's patients in whom the uterus was most normal and resistant, and in whom the lips of the cervix were most intact, it required, renewing the tampon about every second day, five weeks to obtain a dilatation that permitted a complete inspection of the cavity; it is true, that this was the first case, the debut of the method; in general, we may count upon two weeks to accomplish our purpose. In aged people, in whom the genitals are atrophied, we are frequently obliged before getting to the uterus to dilate the vulva and vagina by means of large tampons iodoformed or soaked in spirits of turpentine.

Once the dilatation is effected, it may be maintained for a long time; in one case it persists since a year; in another case since three months and more. The uterus contracts and comes back to itself as soon as the quantity of cotton is diminished, and enlarges more easily and rapidly than the first time if the number of tampons be again augmented. Even if the perfectly dilated uterus be left in a condition of repose, it takes quite a time, sometimes several weeks, till it resumes its normal capacity.

In one word, it can be readily seen from these brief remarks that continued uterine dilatation is perfectly practicable, I would even say easy; but it is certainly frequently very tedious, and necessitates much patience on the part of

both doctor and patient. In many gynecological cases it may be of the greatest service, not alone as a means of confirming a diagnosis, but, above all, for the purpose of applying direct and local treatment under the control of the eye, something which up to now was extremely difficult. Professor Vulliet has been able, thanks to this dilatation, to apply to uterine carcinoma a very energetic treatment, analogous to that of Marion Sims. In several cases the results have been very remarkable, at least so far as we were able to judge after three or four months. The condition of the patient was ameliorated in the sense that the hemorrhages, the fetid discharges and the infectious odor were suppressed—results which are certainly not to be despised, because it gives back to these unfortunates the social life.

The permanent dilatation is an acquisition to gynecology which leads us far away from the epoch when the entrance of air into the uterus was regarded as very dangerous. It will greatly facilitate the local therapeutic of a number of uterine affections, and will in the future find perhaps more and more frequent application.—*Nouvelles Archives D'Obstetrique and de Genec.*, No. I.

---

## Selections.

---

### "Some Remarks on the Use of the Pneumatic Cabinet."

---

HENRY B. LATHROP, M.D., LOS ANGELES.

---

SOMETHING over two years ago, my friend, Dr. Folsom, of Santa Monica, had constructed at considerable expense a Pneumatic Cabinet, on the principle of those he had seen in Nice and other cities of Europe. Being an asthmatic himself, he wished to place within reach of his patients, and those of others, a means of obtaining at least relief.

His cabinet and views, however, met with such a cold reception at the hands of the profession, that after a few months of vexations of various kinds he abandoned the matter and retired quietly to his practice in Santa Monica. The cabinet then passed into my hands, and although my experiments have been few (from lack of material), still I am going to give them, thinking they may be of some



value, if not to the profession here, to those of my fellow-workers on the Atlantic Coast who are following out the same line of inquiry.

Probably the experiments of Dr. Williams, of New York, and those of Dr. Folsom and myself were carried on as it were side by side, although three thousand miles were between us.

But while Dr. Williams was experimenting with rarefied air, we were directing our attention to the effects of air compressed to about one-half of an atmosphere. I therefore think our conclusions of more value, since the publication thus far only deals with cases treated by diminishing pressure.

The cabinet we use is much larger than necessary, being large enough for two people to enter at once. It is simply a redwood box lined with zinc, provided with a door which closes from the *inside*, held in position by strong bars and screws. The upper part of the door is made of glass, and at one side of the door is a stop-cock for the attachment of a tube, so that a patient can expire into the normal air, if necessary, or gases, such as oxygen or nitrous oxide, be pumped in. At the back is another stop-cock for attaching the tube leading to the pump used for getting up the necessary pressure. In front is an air gauge which regulates pressure graduated in fractions of pounds. The patient having entered the cabinet and the door securely closed, the pump is set in motion and the air pressure gradually increased to about three and one-quarter pounds, or about the fourth part of one atmosphere. The pressure is retained at this point for a considerable period of time (from one half to two hours).

This mode of treating lung diseases is not new. It has been in use on the continent of Europe for many years. Also at Ben-Ryding, in Yorkshire, England.

In this country the "Pneumatic Cabinet" is a new departure in medicine, and I have no doubt that the near future will mark a period of great advance in its uses. Dr. Williams seems to have been first to print his conclusions. Mine would lead in a little different direction, as will be seen later on.

There are, to me, fallacies in the lately published paper by Mr. Ketchum, but they are such as any scientific lay man would naturally stumble into. To my old friend and classmate, Dr. B. F. Westbrook, of Brooklyn, I must give

the palm; he having, in conciseness and clearness, exceeded anything I have yet read on the subject.

In order that my conclusions may appear in proper order, and that I may place myself *squarely* on record, I will begin by describing the effect on the healthy subject, of air compressed to one-half of one atmosphere.

The first thing noticed after entering the cabinet is a peculiar "stiffness." This quickly passes, and as the pressure increases there are a few flashes of light before the eyes and tingling in the ears, together with a feeling of pressure on the ear-drums. Swallowing with the nostrils closed promptly relieves this latter symptom by equaling pressure. The expiratory act is at first prolonged, but this quickly passes, and the respiratory movement is performed with a peculiar ease that is very charming. The respirations are always slowed, sometimes falling as low as six per minute. They are, however, full, and the subject seems almost unconscious of any respiration whatever.

The temperature seems almost always raised a trifle, falling to normal on leaving the cabinet. The circulation is slowed, the radial pulse becoming fuller and rounder. A gentle perspiration appears as the seance continues, and some people feel inclined to sleep. This sensation of sleepiness lasts some time, and may, I think, be explained by the fact that as the air is compressed the amount of oxygen is increased, and this combining with the exhaled carbonic acid forms carbon dioxide in small quantity.

The sensations when breathing through a tube into the normal air are not very pleasant. Inspiration is accomplished more or less forcibly and the act is shortened.

Pricking sensations are felt in the limbs, caused undoubtedly by interference with the return circulation from pressure on cutaneous veins.

The effect of expiring into the normal air, while inspiring the compressed, is not attended with any peculiar symptoms. There is, to be sure, the same pressure on the tympani, or perhaps a little more, and the act of deglutition has to be performed oftener. The act of inspiring is performed without effort; air seeming to rush into the lungs and fill every nook and cranny.

My experiments on morbid material are so sparse that I am almost loth to publish them.

I have treated only some eight or ten persons, and will mention briefly two of them:

1st. A case of asthma in a female, aged 54. On entering the cabinet the respiration was labored (in fact she came into my office in the middle of a paroxysm). In ten minutes after the pump started she tapped on the glass and said she was better. In fifteen minutes more she expectorated large quantities of glary white mucus, and said she could breathe as well as she ever could in her life. After remaining in the compressed atmosphere for forty-five minutes she was let out; the attack was at an end. The pressure used was three and one-half pounds to the square inch. Expiration and inspiration had been performed under the same conditions.

She returned after three or four weeks with another attack. With the same amount of pressure she was directed to breathe out through the tube. This shortened the time of the seance to half an hour. She had subsequently three treatments at pressures varying from two to eight pounds. This is more than a year ago, and there have been no more attacks. Is she cured?

2d. The case is that of a young man eighteen years of age. The diagnosis was extensive collapse of lung, due to fibroid deposit. He received seven treatments at varying pressures. The result was that the collapsed lung became inflated, resonance returned to the dull portions of the chest, and respiration, which had been gasping, was easily performed. I have lost sight of him, and do not know if the improvement was permanent or not.

I have never attempted to use spray in the cabinet. I agree with Dr. Westbrook in thinking that sprays never go any farther than the larger bronchi, and I am seriously in doubt if any but the iodine vapor ever reached that point.

It might be urged that force of gravity would carry almost any nebulized liquid that had condensed on the under side of the epiglottis and interior of the larynx to the point mentioned above, but I think that all that would happen would be a strong expulsive act of coughing, and the whole would be expelled.

I have used gases, notably oxygen, in the cabinet with the happiest results, and can commend it as well worthy of the gravest consideration.

Dr. Williams thinks by removing the external pressure from the body, the patient respiring normal air, the lungs are expanded at once to accommodate themselves to the reduced pressure.



It seems to me that I have obtained the same end by having my patient inhale a compressed atmosphere and exhale into normal air. The compressed air will gradually force its way into every part of the lung in order that the pressure may be the same on the *inside* as on the out. In another way I think compressed air acts better than rarefied, and that is by increasing the actual amount of oxygen respired. Then, too, the compression makes it more elastic and increases its (if I may be permitted to use the term) *permeability*. The cases treated were all improved, and thus far my experiments have been very satisfactory to myself.

I am not prepared to defend a position that compressed air is superior to rarefied air, because I know nothing but what I have read on the subject, and have had no chance to judge for myself. It seems to me, however, that many times the sudden expansion of the chest walls by decreased pressure might injure already distended air vesicles in such a way as to rob them of any contractile power they might have, and the moment the distending force was removed a complete collapse follow. In the opposite way, viz.: compressed air externally, the chest walls are first compressed a little, furnished a support as it were, and then, as the air gradually forces its way into the lungs in order to meet the increasing external strain, the air cells are gradually dilated, if collapsed; or, if already dilated, the slight compression they have already received has lessened their caliber a little, puckered them perhaps, and when the stream of compressed air comes forcing its way along there is no chance of straining them above their endurance. It seems to me that this is the logical conclusion. I may be wrong, but I think not.

I shall certainly try the rarefied air when proper cases present themselves. I have read carefully all the literature on the subject, and have referred to the various articles with much pleasure. My studies have been, however, of such a nature that the conclusions arrived at and so elegantly stated have been of little value to me, and this article has been obliged to be written without help from the experience of others. One feels something like a sailor on an unknown ocean, confronted by its immensity and its grandeur, and seeing so many possibilities if he had only the chart to find them. Thus I feel toward "Pneumatic differentiation." (I wish a better name could be found for it; it does not fill the bill). Great are its possibilities and some few are its dangers.



We have often thought that we could cure phthisis with this or that, but did any notable man ever honestly feel that he CURED one case?

It is somewhat strange that on the shores of two oceans experiments were being made at the same time and with the same end in view. While those on the Atlantic side were confining their researches to the effects of rarefied air on morbid lung tissue, Dr. Folsom and myself were working, as stated before, with air compressed from one-quarter to one-half an atmosphere. Are we not approaching the middle, and may not our hands and hearts join in mutual congratulations at no late date? Our obtained results seem to be quite symmetrical, while the theories by which the results have been obtained are opposite. It is the sincere wish of the writer that, all things else being equal, his experiments may not be counted for nothing, but be accorded their proper place and counted at what they are worth. It is also his hope that they may form a bond between him and those following the same line of investigation.—*Southern California Practitioner.*

---

## The Simplest and Most Efficient Treatment of Diphtheria.

---

BY WILLIAM H. DALY, M.D.

---

Read before the American Laryngological Association at its Eighth Annual Congress.

I SHALL not enter into the discussion of the cause, pathology, or clinical history of diphtheria, as the brevity of my paper forbids this; neither shall I hope to bring to your notice either a new plan of treatment, or one that will cure anything like ninety to one hundred per cent. of your cases of diphtheria; I would that I could do so, and thereby claim your gratitude, and probably immortalize myself. Neither shall I discuss the identity or non-identity of diphtheria and membranous croup, further than to declare that I have known respectable and apparently intelligent practitioners to pronounce cases of diphtheroid, diphtheritic and croupous sore throat, either one of the three, with so much promiscuity as not only to stagger one's confidence in the practical possibility of nicely discriminating diagnoses, but

to encourage the opinion that the method is largely in vogue of basing a diagnosis upon the results—viz., if the patient dies, the case was one of diphtheria or membranous croup; if the patient recovers, then there was little if anything at all the matter other than folliculous amygdalitis, or other unimportant diseases.

Neither shall I attempt to open for discussion before this learned body any of the several other very vexed, though always alluring, and important questions that often take the form of pathological conundrums when they are by the identist and non-identist in way of argument flouted so scornfully at one another.

But I shall have the pleasre of drawing your attention to what in my hands has been not only the simplest, but the most efficient treatment of diphtheria. I refer to the calomel treatment. You say, "Oh! that is not new. I have resorted to the calomel treatment for several years." Then, I answer, I am glad to hear you say so, and pray that this brief article may serve at least to renew your faith in it, and thus aid in saving the lives of more children, precious to their parents.

Touching the question of how new or how old this plan of treatment is, I found some time ago, when reading an old non-medical book,\* a memoir of that learned philosopher, divine and wit, the Rev. Sydney Smith, who was also, we may recollect, an educated physician, the following, which not only gives the respectability of age to this plan of treatment, but the crowning happiness of having been in more remote times successful. This note refers to a period about the years 1797 to 1799, at least eighty-six years ago; it runs thus: "A few months after the birth of Sidney Smith's daughter, he went, in the summer, for a short time to Burnt Island, a small sea-bathing place at no great distance from Edinburgh, for the recovery of his wife's health; and here, but for his courage and firmness, he would have lost his long-wished-for daughter in a way he had not at all anticipated. When only six months old she fell ill of croup with such fearful violence that it defied all the remedies employed by the best medical men there. The danger increased with every hour. Dr. Hamilton, then one of the most eminent medical men in Edinburgh, was sent for,

---

\* "A Memoir of the Rev. Sydney Smith," edited by Mrs. Austin, Vol. I. Harper Brothers, 1855, p. 63.

could not come, but said, 'Persevere in giving two grains of calomel every hour; I never knew it to fail.' It was given for eleven hours; the child grew worse and worse; the medical man then in attendance said, 'I dare give no more; I can do no more; the child must die; but at this age I would not venture to give more to my own child.' 'You,' said Sydney Smith, 'can do no more; Dr. Hamilton says to us, "Persevere;" I will take the responsibility; I will give it to her myself.'" He gave it and the child was saved.

Dr. Hamilton, of Edinburgh, a man of solid and courageous convictions is seconded by a medical attendant of neither courage nor strength of moral character; but the father, a man whose life and character were strong and high above all foolish prejudice of any kind upon any subject, says, "I will take the responsibility; I will give it," and saves his child.

I salute your memory, Dr. Hamilton, with the utmost reverence for that courage that makes a man positive about that which he has tried and knows to be reliable, and I here place you on record before an association of some of the most learned men of your profession specially interested in the study of means to stay destruction of life from a disease the character of which you understood and knew how to treat so ably and successfully in remote times in medical history.

You will note that this case was treated by calomel, pure and simple; and that with two-grain doses every hour to a child six months old. You will also note that the case was called croup, and that we are not going to discuss the vexed question of the identity or non-identity of diphtheria and croup in this paper, or following it; and that the foregoing quotation is merely made with a view of recording gratefully the name and honor of Dr. Hamilton and the remote date of the calomel treatment. It will not do to fall back upon the sophistry that diphtheria was not known then, and that a case of croup could be better differentiated then than now, or that the case of Sydney Smith's child was one of croup and not diphtheria. The success of the treatment is sufficient proof to me that the case was one of diphtheria.

Now, briefly, as to the credit for the practice of the calomel treatment of diphtheria in modern medicine. To Dr. William C. Reiter, of Pittsburgh, a gentleman who was learned in other sciences as well as in medicine, this credit is due. He was the apostle of this plan of treatment of

diphtheria, and he for many years persistently practiced the treatment and promulgated the doctrine to his brethren, many of whom were at first unbelievers; he was an earnest and honest observer, fearless in the practice and assertion of what he deemed right. He had large experience and ripe judgment, and, as he stood for many years almost alone in the advocacy of the plan, he deserves still more our respectful praise and free acknowledgment.

In medical works the various mercurial plans of treatment are mentioned without, as far as I have observed, according to Dr. Reiter the credit of having advocated and practiced the method of treating diphtheria by the exhibition of calomel. I regard all the other mercurial preparations as mere excuses or substitutes for this best of all mercurials in diphtheria—viz., calomel. To any one caring to see the brochure of Dr. Reiter, which is little known of, and is so peculiar in its style as to entitle it to be considered an oddity in medical literature, I will say that it was published by J. B. Lippincott & Co., in 1878, and is entitled "A Monograph on the Treatment of Diphtheria based upon a New *Ætiology and Pathology*," by William C. Reiter, A. M., M. D.

As to the *ætiology* and *pathology* as enunciated by Dr. Reiter, I suppose one is at liberty to object or differ without being subject to the suspicion of being unorthodox; but as to the treatment, I can truly say from substantial experience, it is simple, and it is what is all important to us—it is efficient.

Now, what is the method clinically? We will say, to a child three or four years old, suffering from diphtheria (early recognition and opportunity are, as a matter of course, of the utmost importance with this as with any other plan), give of pure, untritured or unmixed with sugar, calomel, in two to five grain doses, every one, two or three hours, either dry on the tongue and washed down with a little ice-water, or, as Dr. Reiter preferred it, given floated on a little ice-water in a teaspoon. This is repeated at intervals until free catharsis follows; the stools are to be carefully observed, and, when they assume the appearance of having floating in them gelatinous masses of dark, rather brightish-green bile giving them an appearance resembling chopped spinach, or the water-polyps seen in watering troughs, then the intervals of the dose can be lengthened so as to keep up this condition of catharsis to the extent of one to three



stools each day. It is not well to diminish the dose, but simply lengthen the interval, as there is less liability by this means to produce ptyalism. This is an important point and ought to be remembered. It has been a matter of much surprise to me that there is little depression caused by the exhibition of these large and frequently repeated doses of calomel in diphtheria, and that ptyalism is so infrequent, especially so if the careful observation is made to keep up catharsis, or rather that fluid condition of the contents of the alimentary canal where the osmotic action is toward them from the blood-vessels, and not *vice versa*. Under this condition of treatment the membrane exfoliates and reforms, if at all, with less and less readiness; the fever abates; the prostration is slowly replaced by brightness and a disposition to activity, which latter should, of course, be prohibited, lest heart paralysis or syncope should suddenly supervene and cause a suddenly fatal termination to the otherwise favorably progressing case.

Dr. Reiter was in the habit of alternating his doses of calomel with large doses of chlorate of potassium. This I have not found necessary, but I have adhered to the calomel in large and frequently repeated doses, with rather light but nutritious fluid diet, and have found it the most efficient of any treatment; and withal so simple for the nurse and so merciful to the patient. The latter is no small factor in the method when we compare the dreadful struggles of the little sufferer at the sight of the commonly used—shall I not say abusively used?—throat-brush and bottle, and all the other impedimenta of the more elaborate treatment to this simpler one of getting the child to open its mouth to drop a powder in followed by a readily accepted spoonful of ice-water. There is needed no argument to show which is the most desirable practically; and I can assure you, my fellows, that this needs but a faithful trial to show you the greater efficiency of this over all other plans of treatment in results.

But there are some rules which I beg you will follow faithfully. These are: (1) Give calomel in its purity; (2) give it in large doses; (3) give it frequently; (4) give it until you have the free and characteristic catharsis; (5) give light and nutritious diet; (6) give little or no other medicine.

If these simple rules are followed, and common sense is allowed to take the place of common prejudice, you will save more of your diphtheria patients by this than by any

other method known to modern medicine—*New York Med. Journal.*

---

### Hospital Reports.

---

#### *Charing Cross Hospital, Under the Care of J. Astley Bloxam.*

---

*Fistula in Ano ; Operation.*—George P—, æt. 30, surgical instrument maker, applied at the hospital on January 10th on account of pain on defecation, with a continual discharge. Patient says that between two and three years ago he had an abscess at the superior margin of the anus, just external to the sphincter; this was opened, and no further inconvenience resulted. About four months ago another abscess formed, this time on the left side of the sphincter—this was opened at the Faringdon Dispensary, and has continued to discharge ever since. He never passes any blood, and the bowels are naturally relaxed. He has no pain on passing motions, and has never, to his knowledge, suffered from piles. Mr. Bloxam examined him, and found an external fistula on the left side of the anus about half an inch from the margin. No opening into the rectum could be discovered. 13th—To-day the patient was anæsthetized, and Mr. Bloxam passed a director up the external opening into the gut and divided the tissues. The wound was then plugged so as to make it heal from the bottom. 16th—The wound was dressed to-day, and, as the bowels had not been open since the operation, a mild laxative was given. The patient was discharged cured on February 1st.

*Gangrene of the Soft Parts and Terminal Phalanx of the Great Toe following Inflammation ; Diabetes.*—George S—, æt. 50, tailor, applied in the out-patient department on account of pain and inconvenience he had suffered for three months past in the great toe of his right foot, resulting from the pressure of the boot. He was seen by Mr. Boyd, and, as the toe was found to be covered with dark sloughs, he removed the proximal and distal phalanges. He was admitted into the hospital on January 3, 1886. 4th—Charcoal poultices are being applied to the stump. Sensation appears to be lost on the inner side of the root of the toe. The patient complains of thirst and passed a large quantity of urine (116 ounces) which on being tested was found to

contain sugar. He says he was in Middlesex Hospital a few months ago with an impacted fracture of the left femur, and at that time he had some ulceration on the outer side of the left leg. 8th—The charcoal poultices are being continued, and the stump looks cleaner. The patient sleeps better now. Urine specific gravity 1025, sugar; quantity passed one hundred and twenty fluid ounces. He is on skimmed milk diet, with eggs, butter, gluten bread and a chop. Medicinally, he is given one-sixth of a grain of codeine in a pill, three times a day. 10th—Sensation is returning in the skin over the root of the toe. Patient takes his food well, with the exception of the gluten bread. 11th—Urine, specific gravity 1032; quantity passed one hundred and forty-six fluid ounces. The stump is being dressed with carbolic lotion. It is still very sloughy. 18th—The patient's bowels are confined, and he has passed scarcely any urine since yesterday. A catheter was passed, and ninety-two fluid ounces were drawn off. 19th—The urine was again drawn off by means of a catheter, and, as the rectum was loaded with hard, dry feces, an enema was given, which had the effect of emptying it. The stump is very foul and discharges a good deal. February 12th—The patient suffers a good deal from dyspepsia, and his urine still contains sugar. The wound remains in about the same condition. He is looking much better, and has gained slightly in weight. 9th—The lower flap of skin is now united to the upper, and the discharge is less fetid. 10th—The patient was transferred to the medical wards, where the wound gradually healed over. The diabetes was not sensibly improved, and he was discharged on April 10th.

*Transverse Fracture of Patella (Left).*—Samuel T—, æt. 28, shoemaker, was walking across the street when his foot slipped and he fell forward. He was able to get up and walk away, but his knee pained him and seemed "stiff." When he got home the knee began to swell, and he came to the hospital. On examination, the patella was found to be fractured transversely. The leg was placed on a pillow and ice-bags applied. March 19th—The patient will not consent to an operation. The swelling and heat have subsided to a great extent. 22d—Since the swelling has gone down, Mr. Bloxam has examined the seat of fracture, and found the fragments in fair apposition. Crepitus can be felt. 26th—The leg was put up in a plaster-of-Paris band-

age, and the patient was allowed to leave the hospital on the 29th.

*Fissure of Anus with Ulceration of Rectum.*—Josiah D—, æt. 33, traveler, was admitted to the hospital on January 5th. He complained of passing blood from the rectum for more than a month past. The blood is generally of a bright red. The bowels have not been relaxed, but there has been a tendency to constipation. He suffers no pain, nor is there any straining or tenesmus. On examination a small, blind fistula was found on the right side of the external sphincter. There are two sores on the penis, one immediately adjacent to the frenum, the other with an indurated margin on the corona. No discharge from urethra. Patient says that the sores came about a month ago, a fortnight after connection, and are very painful. He has had no rash nor sore throat, but he is very weak and his hands are tremulous. Has been a "fair" drinker. He is anæmic. 6th—To-day Mr. Bloxam passed a speculum up the rectum and saw a small fissure on the posterior surface of the gut. He passed a probe down the fistula, but it did not apparently open into the rectum. No albumen in urine. The sores were dressed with iodoform. 13th—This morning Mr. Jones divided the tissues between the two openings. The patient complained of a good deal of pain all day. 15th—The sores on the penis are nearly healed—patient is very low and nervous. 23d—Patient appears to be progressing favorably, but there is a little redness round the wound. 26th—The edges of the wound are somewhat everted and of an angry red. 29th—To-day the patient was put under ether and the edges of the wound were pared. February 1st—The wound is being dressed with iodoform; patient complains of pain in the right testicle, which is swollen and tender. 2d—The pain in testicle is better and patient feels better than he has done. The wound is healing rapidly and the tremulousness of the hands has now disappeared. 10th—Patient left the hospital convalescent.

*Severe Hemorrhage from Varicose Ulcer of Leg.*—William W—, æt. 45, cab driver, was brought to the hospital on December 20th, in an insensible condition and bleeding profusely from an ulcerated surface situated on the inner side of the left leg. The hemorrhage was easily checked by raising the leg and applying pressure. Patient is a stout, florid-complexioned man. He says he has had varicose veins on both legs for many years, and as he has got older



the veins have much increased in size. He had a severe attack of hemorrhage from the ulcer twelve months ago. He has never had any serious illness. 22d—Patient suffers from headache, specially frontal, and he is very prostrate from the loss of blood. 23d—Patient was able to leave to-day.

*Sinus Extending from One Inch Above the Anus in the Median Line to the Level of the Posterior Superior Spine of the Ilium, following Injury.*—George C—, æt. 27, packer, was admitted on November 27th. He said that eighteen months ago, while coming down some stone steps, just as he got to the bottom, he missed a step and fell to the ground on his buttocks. From that time he felt an aching pain over the sacrum, and two months after the accident he noticed a small, tender swelling over the seat of injury, which gradually increased to the size of an orange. It remained stationary for about a fortnight and then slowly disappeared, discharging its contents through a small aperture over the middle of the sacrum. This swelling recurred from time to time, discharging through a fresh aperture, so that five in all were formed. On the last occasion the pus was sanious. Patient was a healthy, robust man. No swelling was perceptible on admission, but some thickening was present. There is a discharge from all the five apertures which all lead into the abscess cavity. December 1st—The abscess cavity shows signs of refilling and has become painful and tender. 2d—To-day Mr. Bloxam opened up the abscess cavity and sinuses, and plugged the wound so as to secure granulation from the bottom. A great quantity of foul-smelling pus was evacuated. The wound was dressed with carbolized oil and a perineal bandage put on. 6th—The wound is now less offensive and is getting on well. Patient is beginning, as he says, to feel more himself. 11th—The wound is getting on well and is rapidly granulating up. 15th—There was a large collection of pus in the wound this morning, which did not appear to be doing as well. Patient has passed a bad night. The wound was carefully syringed with carbolic lotion and dressed. 19th—The wound is now healing fast, and there is very little discharge. 23d—The patient was discharged to-day, to attend as an out-patient until the wound is completely healed.

## The Life and Destruction of Micro-Organisms.

---

BY JOHN L. DAVIS, A.B., M.D.,

Lecturer on Materia Medica and Therapeutics in the Medical College of the University of Southern California.

---

IN order to understand what is necessary to render an antiseptic or a disinfectant efficient, it is proper to consider the conditions essential to the life of bacteria. And this may be briefly done without entering into a discussion of the genesis and morphology of micro-organisms.

Certain definite factors are requisite to the life and development of all of the schizomycetes, whether (to adopt Cohn's classification) they belong to the sphero-bacteria, embracing the micrococcus and the sarcina or the micro-bacteria, having the classes of bacterium termo and lineola; or the still more important division, the desmo-bacteria, including the widely diffused bacillus with its several representatives, and the vibro, called leptothrix by Hallier and others.

These factors are essential to germ life, whether the various bacteria are different and distinct varieties of the proto-phytes, as is held by most mycologists of our day; or whether some of them, if not all, represent merely developmental stages of one common form (*e. g.*, the cocco-bacterium septicum of Billroth), a theory supported by the authority of Klebs, Billroth, Hallier and other eminent scientists. (Zurn held that micrococci are only stages in the development of molds).

The conditions necessary to the life of all germs are a certain nutrient substance, with a sufficient amount of water, a moderate degree of heat, and the absence of all deleterious matter. The material essential to the sustenance and development of micro-organisms is both organic and inorganic. The chief elements represented are carbon, nitrogen, sulphur, potassium, magnesium and phosphorus; oxygen, too, is necessary to the life and growth of most bacteria, as has been demonstrated by Joubert, Pasteur and others. The bacillus anthracis dies if deprived of oxygen. On the other hand, some germs are unfavorably affected by oxygen, notably the clostridium, as has been shown by Prazmowski. Those fungi requiring free oxygen, such as

the germs of anthrax and of malaria (Klebs) have been called by Pasteur *aërobious*; those which do not require this element or are unfavorably affected by it are named *an-aërobious*; to the latter class belong the bacterium *termo* and the clostridium *butyricum*. All bacteria are killed outright by pure oxygen. (Ziegler).

With reference to moisture it has been shown by the investigations of Nägeli that water is necessary to the growth and multiplication of all bacteria, though many of them are capable of living for a time without it. Koch asserts that the bacillus of anthrax dies if it is dried, though its dried spores may retain their vitality for years.

A proper temperature is of primary importance to germ life. As a rule, heat stimulates vital activity and lower temperature depresses the vital functions within certain limits. According to Van Tieghem few bacteria can grow at a temperature as high as 160° Fahrenheit, though a higher temperature is necessary for their destruction, and the spores are still more tenacious of life. Boiling water destroys all micro-organisms if they are exposed to its action for a certain time. In dry air, however, a much higher temperature is needed for their destruction, as has been demonstrated fully by Koch, Eidam and Gaffky.

The temperature most favorable (optimum) to germ development is between 90° F. and 100° F., though the optimum varies somewhat with different varieties. Thus, according to Cohn, the bacterium *termo* has its optimum between 86° F. and 95° F., while it can grow at any temperature between 41° F. and 104° F. The bacillus of tuberculosis with an optimum of 98½° F. has a range between 82° F. and 108° F. (Koch).

The conjoined influence of temperature and soil is witnessed in the behavior of certain germs (the *tyrotriches*) which are destroyed by a temperature of 194° F. to 203° F. in a neutral fluid, but which in a weak alkaline fluid can live at a temperature of over 212° F. The *tyrothrix filiformis* can live in milk at 212° F., but in an acid fluid this temperature instantly kills it. The temperature range at which micro-organisms flourish is the criterion in diagnosis between germs called parasitic and the non-parasitic; germs with a range between 84° F. and 108° F. can nowhere on earth constantly find their optimum temperature except in animal bodies.

In addition to requirements of a suitable nutrient fluid

and proper temperature, a certain degree of quiet is essential to germ growth; agitation has been shown by Horwath and Reinke to hinder both the development and multiplication of bacteria.

Reference has already been made to the fact that bacteria life is influenced by the chemical reaction of the fluid in which the germs lie. Certain foreign matters are detrimental to their development and some are extremely destructive to their vitality. Vitality is affected, to use the words of Ziegler, "by the presence of foreign or non-nutritive matters in the nutrient liquid." Thus corrosive sublimate, iodine, etc., even in small amount, check the growth of germs or kill them outright.

But we may go a step further, and we find that some varieties of micro-organisms are destructive to others. As higher plants often encroach on and interfere with one another, so in some cases bacteria, yeast plants and molds interfere with one another and contend for nutriment, as has been shown by Nageli. A bacterium which is thriving in a given liquid may be checked in its growth and even destroyed by merely introducing another fungus which is still better adapted to the liquid; micrococci may be starved out by microbacteria, and under certain circumstances bacilli may be killed by the bacterium termo.

This characteristic of germs has led to the suggestion of curing trachoma by the gonococcus, lupus and epithelioma with the micrococcus of erysipelas, and tuberculosis by the inhalation of the micro-organism of putrefaction.

Having all these facts in view as to the dependence of bacterial life upon the several conditions named, we are able to appreciate clearly the rational requirements for efficient antisepsis and disinfection. In order to live, germs need water with a proper sustenance, a suitable temperature and the absence of certain destructive elements. Therefore antiseptics and disinfectants to be efficient must either deprive bacteria of the water and food they live on, or change their temperature to such an extent as to kill them; or, finally, they must act upon the germs as foreign matter or poisons.

The effect of the first method is illustrated in the harmlessness of the virulent germs of smallpox and cholera when dried. They remain perfectly innocent until the requisite amount of moisture is brought to them, when they produce their dreaded diseases. It is illustrated again in the immunity some persons have from certain infectious and con



tagious diseases. In explanation of this immunity, whether due to a previous attack of the disease, protective vaccination, or individual idiosyncrasy, three theories are advanced, the first two of which bear directly on the subject under discussion. The first assumes that the germs fail to find a supply of nutritive material, and hence the disease can not appear. The second is the antidote or antagonism theory, which supposes that as disease germs multiply in the system they develop some product which reacts fatally upon them. This is analogous to the phenomena of fermentation, whereby the *torulæ* cease to multiply and sink to the bottom as soon as the proportion of alcohol reaches 20 per cent.

The third theory is that of accommodation, assuming that the tissues in their struggle with the disease germs develop a higher degree of vitality, whereby they are enabled to resist future attacks.

With the existing state of sanitary and chemical science, we are not able to withdraw the water or other elements necessary to bacteria life except in so far as it is successfully done by protective vaccination against disease. Hence, except in this way, it is impossible to starve germs (if the expression is permissible) sufficiently either to destroy them or to prevent their multiplication.

We turn to the next condition necessary to vitality, viz.: temperature, and we find that extremes are fatal to micro-organisms. But a degree of heat or cold sufficient to kill pathogenic organisms in the body would be more rapidly fatal to the living animal, and, consequently, can not be employed against the living germs within the body. But for purposes of disinfection and the destruction of micro-organisms outside of the body, extremes of temperature, especially heat, constitute our most valuable means. The elaborate investigations reported two years ago by Dr. Parsons, Medical Officer of the Local Government Board of Great Britain, are of great value. He showed that, with the exception of spore-bearing cultivations of the bacillus anthracis, all the many infective materials experimented on were destroyed by one hour's exposure to dry heat at 220° F., or by five minutes' exposure to 212° F. in steam or boiling water. Dry heat is thus much less rapid in its effects than moist heat; it is also a more tedious method of disinfection where the thorough penetration of such articles as bedding, etc., is concerned. Dr. Parsons reached the

conclusion that for general disinfection hot steam, generated and applied by suitable apparatus, is the best means at our command.

Many articles of clothing and bedding, however, may best be disinfected by boiling water. Dr. Buchanan claims that, where feasible, boiling for a few minutes in water is the best method for treating infected articles. Similar conclusions were reached by Drs. Sternberg and Rohe, of the American Health Association.

Finally, in the employment of substances destructive to bacteria by chemical action, we have as yet our best means of dealing with germs within the body, and a means secondary only to heat for their destruction outside of the organism. These are the substances called disinfectants, and they act in various ways. One class acts as oxidizing agents; oxygen itself, when pure, is fatal to all bacteria; ozone, the permanganate of potassium, etc., acts in the same way, by oxydizing the organic matter on which bacteria live.

Another class, of which sulphurous acid is the type, comprises reducing agents which act by withdrawing the oxygen from the tissues; or, like chlorine, they unite with hydrogen and withdraw it from the germ nutriment.

A third class, embracing certain metallic salts, as the chloride of zinc, are supposed to owe their power to the ability they have of coagulating albumen, or of uniting with it.

A class of disinfectants, represented by carbolic acid, arrests molecular metamorphosis, whether physiological or pathological.

Mineral acids change the chemical reactions of the fluids, and in this way prevent germ growth or destroy germ life.

Thus in our contest with pathogenic micro-organisms we have at command three agencies, one or other of which is to be employed as circumstances require, viz.—protective vaccination, high temperature, and certain substances which are directly destructive through chemical action.

Discussion of this subject in any greater detail is not at this time admissible; but, with the foregoing facts before us, we have the principles upon which true disinfection and antisepsis must be based; and it is only by a careful and thorough observance of these principles that progress is possible in hygiene and sanitary science.—*Southern California Practitioner.*

## Microscopy.

### San Francisco Microscopical Society.

Reported by A. H. Breckenfeld, Recording Secretary, for  
CINCINNATI MEDICAL NEWS.

THE annual reception tendered by the San Francisco Microscopical Society to its friends at Pioneer Hall, proved to be a most enjoyable affair. Long lines of tables were ranged along three sides of the hall and on the platform. On these were placed forty-five microscopes (the largest number ever exhibited at any one time on this coast), embracing examples of the best work of such renowned opticians as Zeutmayer, Ross, Beck, Zeiss, Crouch, Bausch, Lomb, Gundlach, Nabet, Bulloch, Baher and others. Among the objectives used, in addition to the productions of the makers already named, were choice specimens of the skill of Tolles, Spencer, Powell, Lealand, Hartnack and Swift. Nearly all the lamps with the instruments were screened with Japanese shades, which not only produced a pretty effect, but added to the comfort of visitors and exhibitors by protecting their eyes from a glare of light. The list of guests comprised many of the prominent names in social and scientific circles of this vicinity, and the occasion was evidently a thoroughly enjoyable one to all concerned.

The first exhibitor on the list was Dr. C. P. Bates, who showed an interesting slide of living infusoria, chiefly *Monadina*. The strange forms and erratic gyrations of these lowly organisms always proved attractive to observers.

At the next table the circulation of the blood was beautifully shown by Dr. J. M. Selfridge, in the mesentery of the living frog. The sight of the oval corpuscles coursing swiftly through the blood-vessels never fails to excite wonder and delight.

Crystals of gold and silver were displayed by George C. Hickox under his large Beck binocular, and his exhibit was an exceedingly attractive one. Some large fern-like crystals of gold were particularly admired.

E. J. Wickson showed a fine series of living scale insects under four excellent instruments. As the ravages of insect pests in this State are at present attracting so much atten-

tion, this exhibit was received with peculiar interest. The red orange scale (*Aspidiotus aurantiæ*) was a most striking object.

A. H. Breckenfeld exhibited the head of a jumping spider, whose six gleaming eyes gave it a peculiarly ferocious appearance; the head of a male wasp, showing the beautiful structure of the sucking lingua or tongue, and a slide of young oysters (rolling in fluid), to which polarized light imparted gorgeous hues.

The exhibit of Chas. W. Banks was, as usual, a large and varied one. An ingenious apparatus for showing the combustion of various metals in the electric arc received many admiring comments. Under another microscope were shown the brilliant effects produced by the passage of the electric spark through a film of loose carbon. It was one of the most effective displays in the line. A number of other attractive objects were shown by Mr. Banks, notably a fine slide of a brittle star-fish (*Ophiocoma neglecta*), beautifully shown under dark field illumination.

At the next table Dr. J. H. Stallard had a fine array of seven microscopes under which were arranged slides illustrative of the structure of normal and also of diseased arteries. The various tissues had been skillfully differentiated by various staining processes, and the distinctive features of each slide were carefully explained by the exhibitor.

The elegantly sculptured egg cases of the house-fly were shown by William Payzant, and their beauty was a revelation to most of the spectators. The same gentleman exhibited a slide of the pretty little "brine shrimp" from the evaporating pans of the salt works near Alameda.

The next exhibitor, W. F. Myers, showed a slide on which the delicate and beautiful structure of the mosquito was effectively displayed. He also exhibited an attractive mount of red marine algæ.

L. M. King was announced to exhibit living rotifers, but at the last moment these were so disobliging as to die. In their place the slide contained a fine example of the larva of the day-fly (*Ephemera vulgata*), which was examined with the deep interest always excited by living organisms of this kind.

An exhibit resembling the most delicate frost-work was shown by A. S. Brackett. It consisted of the beautiful crystals of muriate of cocaine, strikingly displayed on a dark ground. A neat placard, giving the name, derivation,



uses and chemical characteristics of this salt, was a commendable feature of this exhibit.

Perhaps the most unique object on the entire list was that shown by Prof. Hanks. It was an insect of a species now extinct, perfectly preserved without the least apparent distortion, in a block of amber, wherein it had rested for untold ages. As compared with this perfect specimen of nature's embalming, the mummy of Egypt's most ancient king is a thing of yesterday.

Henry C. Hyde's exhibit consisted of the blood-red crystals of platino-cyanide of magnesium, selected diatoms shown with dark ground illumination, and the resplendent scales of the Brazilian diamond beetle. A noteworthy feature of the exhibit was that each mount was illuminated by a minute electric incandescent lamp, attached to an arm with universal movement. The light was shown to be perfectly manageable, intense in quantity, and soft and pure as to quality. To the microscopists present this exhibit was of especial interest.

At the adjoining table, the next exhibitor, Arthur M. Hickox, showed the crystal of brucine, using polarized light. Brucine is an alkaloid extracted from *Strychnos nuxvomica*, and its oddly arranged crystals polarize brilliantly.

Dr. Thomas Morffew exhibited a slide showing the perfection to which microscopic engraving on glass can be carried. He also showed one of Möller's wonderful "Typen-Patten" of diatoms, the name of each being photographed beneath it.

The President of the society, Dr. S. M. Mouser, showed a fine line of specimens of anatomical and pathological subjects. An injected ileum of the rat was much admired for its beauty. A slide of *Bacillus anthrax* was shown with one of the new Zeiss lenses made of the recently perfected optical glass. The crisp definition of this objective was particularly noticeable.

J. Z. Davis followed with several slides of vegetable sections which had been double-stained. The different layers of tissue were sharply defined and the coloring was brilliant.

A slide of *Bacillus tuberculosis* was the subject chosen by Dr. F. Riehl. Using a dry lens and an amplification of 275 diameters, the bacilli were shown with great clearness.

The absorption bands in the spectra of various colored solutions were shown by Professor Thomas Price with a micro-spectroscopic ocular. This method of testing has

become of great value in many directions, notably the detection of blood-stains. The presence of almost inconceivably small particles of coloring matter can be made manifest by this instrument.

The last exhibitor was F. L. Howard, who showed a fine mount of the beautiful Polyzoan *Bicellaria ciliata*, using polariscopic illumination to produce the glowing tints so much admired. The ingeniously contrived microscopic lamp of this exhibitor also received much favorable attention.

---

## Gleanings.

---

DIFFUSE HYPERTROPHIC SYPHILOMA OF THE FACE.—Dr. Bidon gives this name, in his thesis, to a rather rare affection generally described as syphilitic leontiasis (*Journal de Médecine et de Chirurgie Pratiques*). This hypertrophic syphiloma, which may be considered a tertiary lesion, has two modes of evolution: one is rapid and the other is slow. In the first case, enormous deformity of the face is produced in a few days, the lesion beginning in the lips or nose. Generally, however, the process is slow, and tubercles are observed forming, uniting and becoming fused into one mass. When the affection has reached its limit, the face is considerably tumefied, the features are distorted and extremely hard and marked, the cheeks very prominent, hiding the nose in the furrow left between them. The face is divided by furrows of great depth and elevations which seem to be so many added pieces. It is then that the disease may be mistaken for elephantiasis. The swelling of the eyelids and nose is considerable, but it is in the lips that the deformity is most characteristic. The hypertrophied upper lip becomes prominent and projects forward; it is divided into lobules by a number of small fissures, and the lower lip presents about the same appearance. The ears occasionally present themselves three or four times their normal size. Besides this, the intra-buccal organs are either separately or jointly affected. The consistence of these lesions is remarkable. It is an œdema, sometimes soft, at other times hard. When the parts are taken between the fingers, a specific, elastic resistance is experienced. There are no subjective symptoms, and it never terminates in ulceration or suppuration. I had

occasion to see a very well-marked case of this kind about a year ago. A patient, a young man, had been kept for a long time on chaulmoogra oil, his physician supposing the case to be elephantiasis. He improved considerably on antisyphilitic treatment, but passed out of sight.

KERATOSIS FOLLICULARIS.—Dr. Prince A. Morrow details the clinical history and microscopical appearances of a case of keratosis follicularis, associated with fissuring of the tongue and leucoplakia buccalis in the *Journal of Cutaneous and Venereal Diseases*. The patient, a sailor, aged twenty-one, about five years ago observed a number of blackish protruding points upon the backs of his hands and, soon afterward, on other portions of the body. When he applied for treatment there was an implication of almost the entire follicular apparatus of the skin in a morbid process which had resulted in a dilation and projection of the excretory ducts, and the presence of comedo-like plugs, which were altered in character and exaggerated in development. Examination of the contents of the follicles showed a deficiency of fatty matter and a marked increase in the corneous element. They were dry, hard and of horny consistence. The cause of the cornification was probably some structural peculiarity or lesion of the sebaceous glands, permitting a premature exfoliation of the epithelium before fatty transformation of the cells was complete, and associated with this probably atony of the glands or deficiency of excretory power. The sebaceous plugs, resulting from this, were of the nature of comedos, but more exaggerated and generalized. Lesser describes this rare disease under the name of ichthyosis follicularis. In addition to the cutaneous symptoms, it was observed that the mucous membrane on the soft palate and roof of the mouth was studded with innumerable minute brownish spots, rather depressed in appearance, although feeling perfectly smooth. The tongue was large, somewhat thickened and flabby, and rough to the touch. The surface was white and pasty, and fissured. No history of syphilis could be made out.

PREVENTION OF MISCARRIAGE.—Dr. W. J. Strother reports the case of a married woman, thirty years old, who had had six or seven miscarriages, these generally occurring from the third to the fifth month. Hemorrhage would begin about the second month, and recur every four days until

the foetus was expelled. At the last miscarriage Dr. Strother was in attendance, and remembering having read of a case of abortion reported as being due to fatty degeneration of the placenta, in which tincture of chloride of iron and chlorate of potassium were employed with success in the succeeding pregnancy, he examined the placenta and found it almost one mass of fat. At the beginning of the patient's next pregnancy, therefore, he ordered a mixture of tinct. chloride of iron,  $\mathfrak{J}\text{ij.}$ , and chlorate of potassium,  $\mathfrak{J}\text{ij.}$ , in water,  $\mathfrak{V}\text{vj.}$ , of which a teaspoonful was given three times a day. She took this regularly almost every day until she was delivered, at full term, of a healthy male child. About the third month she had a slight "show," but the hemorrhage never returned.—*Gaillard's Medical Journal.*

*To the Editors of the Therapeutic Gazette:*

POTASSIUM PERMANGANATE IN AMENORRHŒA.—*Gentlemen:*—In your June issue is an article on the use of permang. pot. as an emmenagogue, and asking for results. My conclusions, after using it in about fifty cases, are as follows:

1. It acts with certainty in about seventy per cent. in selected cases.

2. It may be given at any time, but preferably one or two hours after eating, as it is not so apt to sicken the stomach. I don't think it is any more efficient when given on an empty stomach.

3. I have used the sulphate in a number of cases with less certain effect; the result attained, however, may have been accidental.

4. In most cases it produces an exhilaration of spirits.

5. It has a decided tonic effect.

6. It will become an indispensable therapeutic agent.

7. Its disagreeable effect on the stomach is best relieved by a combination of

Cerri oxalat.,	.	.	.	.	gr. i.
Cocaine hyd. chlor.,	.	.	.	.	gr. $\frac{1}{6}$
Bismuth, subnit.,	.	.	.	.	gr. v.
Pulv. ipecac,	.	.	.	.	gr. $\frac{1}{10}$ M.

Ft. cachets, one every two hours.

Respectfully,

BENJAMIN MARSHALL, M.D.,  
Col. Phys. and Surg., N. Y.



**ERYTHANTHEMA SYPHILITICUM.**—At the late meeting of the American Dermatological Association, Dr. E. B. Bronson read a very interesting paper upon the above subject, his attention having been drawn to the subject by a peculiar case of syphilis in which lesions, regarded as foreign to the generally accepted list of syphilodermata, made their appearance. A study of the subject has led Dr. Bronson to the following conclusions or rather inferences, as he terms them: Certain forms of erythanthemata arising in the course of syphilis may be regarded as products of the latter disease; more especially when they coincide with, or are directly followed by an outbreak of typical syphilitic manifestations. In view of their resemblance to simple angioneurotic or neuritic affections of the skin, it is probable that they also correspond to the latter in their mode of origin; and, while doubtless due primarily to the syphilis, they are not pathognomonic of the latter disease, and probably not equivalent etiologically to true syphilodermata. Finally, the syphilitic erythanthemata may, through reflex irritation, and in the same manner as a local traumatism, become the seat of a characteristic syphilitic infiltration.

**A PARASITE IN SCROTAL CONCRETIONS.**—Dr. V. Galippe writes a short note, to *La France Médicale*, in which he states that there are found, in certain persons, upon the scrotum a number of small roundish bodies which project slightly above the level of the skin and present to the feel the impression of calcareous concretions. By an incision they can be easily extracted together with their envelope, and then present a bluish color. They are disc-shaped, smooth and with rounded edges. These concretions contain cholesterin crystals and seem to have developed at the expense of the sebaceous glands. The younger the concretion the more soft. Cultivations of these concretions in previously sterilized liquids have given rise to a micro-organism which can be isolated and cultivated. Dr. Galippe brings this observation forward as additional proof in favor of his theory, respecting the formation of calculi in the human economy, which he has already published.

**TUBERCULOSIS OF THE SKIN BY DIRECT INOCULATION.**—Tuberculosis of the skin is one of the subjects of dermatology which of late has been receiving a considerable amount of attention, and the fact that it is comparatively easily inoculable, and easily derived from the products of tuberculous

patients, should make all who have to come into contact with these sources of infection, more careful to avoid contracting local and possibly general tuberculosis. Paul Raymond details four cases in *La France Médicale*, citing in addition quite a number which have already been published by various authors. Clinical experience had pointed out the possibility of giving rise to tuberculosis of the skin by inoculation, and microscopic examination to-day has established the fact beyond the possibility of a doubt by finding the characteristic bacillus of tuberculosis present in these *tuberculomata*. From the clinical histories of the various cases observed, it seems that an interval of from eight days to two months is necessary for the complete development of the anatomical tubercle. The primary wound would hardly take on a peculiar aspect before the eighth to the fifteenth day.

A CASE OF VOLUNTARY STARVATION.—Dr. A. Voelkel, in the *Deutsche Medicinische Wochenschrift*, No. 31, 1886, reports the case of an old toper, of a very obstinate disposition, to whom the landlords finally refused to supply any more liquor. The man said then that he would live no longer, went to bed, and refused to take any food. He lived for twenty-four days, taking nothing but a little water and brandy. He died in a deep stupor, without convulsions. At the autopsy the body was found not to be greatly emaciated, a considerable layer of fat still remaining on the chest and abdomen. The stomach and intestines were filled with gas, but the intestines were otherwise entirely empty, and the stomach contained only about three ounces of a brownish fluid, the walls of both stomach and intestines being very thin and pale. The kidneys were normal, but rather soft; the bladder was empty. The spleen was very small, the liver fatty, and the gall-bladder was filled with about an ounce of thick brown bile. The heart was small, fatty degenerated, and empty; the lungs contained air, but were dry on section. All the organs were very anæmic.

CONSERVATIVE SURGERY OF THE FINGER.—Mr. Charles Tanner reports the following case, illustrating the value of conservatism in the surgical treatment of injuries of the fingers, in the *British Medical Journal* of August 7, 1886. A domestic servant while chopping meat had nearly amputated her left forefinger. The bone was completely severed,

and both digital arteries were divided; the only parts uninjured were the skin and subcutaneous tissues, and the flexor tendons on the palmar aspect of the finger. The wound was carefully cleansed with carbolic acid lotion (1-20). Both digital arteries were ligatured, and the edges united with deep silver-wire sutures. Iodoform was dusted on, a piece of protective placed round the wound, the finger enveloped in salicylic wool, and the arm placed on a pistol splint. The sutures were removed in a fortnight; the wound, with the exception of a granulating surface on the cased side of the finger, had healed by first intention. Within a short time after the removal of the dressing the patient could move this finger almost as well as the others.

THE KIDNEY IN DIABETES.—In a memoir lately published ("Le Rein dans ses Rapports avec le Diabète") Dr. P. S. Inglessis gives the results of his investigations upon the renal changes that accompany diabetes mellitus—changes which he avers are more frequent than is commonly admitted. The most constant is hypertrophy of the kidney, a condition doubtless related to the polyuria that is mostly the chief indication of the functional derangement of the organ. This hypertrophy is, according to the writer, characterized not only by obvious enlargement of the kidney, but histologically by a notable increase of the cells of the convoluted tubules. While renal hypertrophy characterizes the earlier stages of the disease, renal inflammation is more common in the advanced period. Parenchymatous nephritis is the usual type, but it is difficult often to eliminate all other causes besides diabetes in many cases. In some, however, there is no question of the direct relation between the two affections.—*The Lancet*, August 28, 1886.

GASEOUS MEDICATION PER RECTUM.—The ingestion of gaseous medicines by the lower bowel was the subject of a recent communication by M. L. Bergeon to the Paris Academy of Sciences (*Comptes Rendus*, July 12th). His research has extended to a variety of diseases, but for the present he only records his experience in the treatment of pulmonary phthisis. After having tried a variety of balsamic substances of parasiticide or antiseptic repute, M. Bergeon gave the preference to sulphurous mineral waters (Eaux Bonnes, Challes, etc.). A current of from four to five litres of carbonic acid gas traversing from 250 to 500 grammes of

sulphurous mineral water was introduced per rectum twice in the twenty-four hours. After a few days' use, cough was notably diminished and almost suppressed, the expectoration greatly modified in quality and quantity, the sweating stopped, and the general state improved; and that not only in incipient, but also in confirmed phthisis. Daily auscultation established the disappearance of moist râles.—*The Lancet.*

LEMONADE IRON.—The following method of prescribing the muriated tincture of iron is recommended as being the most palatable, elegant and altogether satisfactory method ever yet offered to the profession. Professor Goodell, of Philadelphia, terms it "lemonade iron." I think it originated with him:

R <sub>x</sub> .	Mur. tinct. ferri., . . . . .	℥iv.
	Acidi phos. dil., . . . . .	℥vj.
	Spts. limonis, . . . . .	℥ij.
	Syr. simp. ad., . . . . .	℥vj.

M. Sig.—Two teaspoonfuls in water after each meal. The spirits of lemon is preferred to the syrup of lemon, as the latter would render the mixture too acid. I have found the above combined with pepsin an excellent tonic when indications are associated with feeble digestive powers.—*Med. World.*

RESORCINE IN THE TREATMENT OF EPITHELIONA.—Dr. Rubino Antonio reports a case of epithelioma developed on the side of the nose. The tumor was the size of a pea, but seemed adherent to the bone, and was surrounded by an inflamed zone of considerable size, the skin being to a great extent involved. An operation not being thought advisable, Rubino decided to employ resorcine. The tumor was washed twice a day with permanganate and an ointment applied composed of fifteen parts of resorcine and twenty of vaseline. Suppuration ceased almost immediately, the tumor diminished little by little, and at the end of five months there was only a small white circular scar visible.—*Journal de Med. de Paris.*

SYPHILIS OF THE PLACENTA.—In a thesis written by Dr. A. Gascard, the deductions made may be summarized as follows (*Jour. Cut. and Ven. Dis.*): The existence of placental lesions, during the course of syphilis, is undeniable,



but they are by no means constant. Evidence of hypertrophy of the villosities with fibrous degeneration of the connective stroma and obliteration of the vessels may be found, coincident with certain patches of fatty degeneration. In these cases where pregnancy does not come to full term, lesions of the placenta and of its membranes may be formed, more or less pronounced, according as the delivery has taken place near the regular term. Proper specific treatment may result in a foetus carried, born at full term and living, in women who have previous to that time had a number of successive abortions.

COCAINE.—1. M. Wenis reports a case of burn on the face, horribly painful; nothing seemed to give relief until cocaine muriate in solution was applied, and the pain at once ceased.

2. Hacker used a 50 per cent. solution with great benefit in erysipelas of the face. The vehicle preferred was palm oil or cold cream.

3. In hiccough, Dr. Campardor used hypodermic injections of  $\frac{1}{100}$  gr. in a case of typhoid with very obstinate hiccough.

4. M. Labric obtained good results in pertussis by applying a five per cent. solution to the throat and parts adjacent.

5. M. Paul Bert has injected the bulbæ of blisters and produced complete anæsthesia of the denuded surfaces.—*Journal de Med. de Paris.*

TRAUMATIC TETANUS WITHOUT EXTERNAL WOUND.—Dr. Acontz relates in *Spitalul*, No. 4, 1886, the case of a healthy trooper who, having received a blow in the hepatic region, instantly fell insensible and remained so for two hours, by the end of which time trismus suddenly appeared. A venesection was performed, and leeches were applied to the hepatic region. Both of these means, however, failed to rouse the patient. He came round only after a hypodermic injection of five centigrammes of hydrochlorate of morphia. The further treatment was expectant. The man improved from day to day, and after a ten days' stay left the hospital quite well.

OLEATE OF MERCURY AND MORPHIA.—Dr. J. H. Claiborne, of Petersburg, Va., recommends this as a capital remedy in acute glandular inflammation and phlegmonous inflammation threatening carbuncle. He has also used it together with

constitutional treatment as indicated in carbuncle itself, and reports encouraging results in two cases; pain immediately diminished and soon vanished, and recovery was rapid and complete. No cutting—no carbolic acid—no caustic potash. Equally good results occurred in bubo; adenitis in children, acute or chronic, the result of local irritation, the sequel of scarlatina, or the concomitant of diphtheria. — *Gaillard's Journal*.

THE citizens of Baltimore are just now being presented with the circular of a "Pile" doctor of this city, which announces his successful treatment of Piles, Fistula, Fissure, etc., and offers as "home evidences of success" the names of a large number of our people. It must be exceedingly flattering to the vanity of these well-known citizens to have their infirmities paraded so conspicuously in a hand-bill. There is nothing so refreshing to the pride of the average man as notoriety, even though this notoriety affixes its stamp upon the lower outlet of his digestive apparatus. — *Md. Med. Jour.*

ANTISEPTIC PAPER DRESSING.—Dr. Don Antonio Morales Perez describes in the *Revista Médica*, of Seville, a simplified antiseptic or Listerian dressing, consisting of bibulous paper heated to  $110^{\circ}$  C. and soaked in a solution of carbolic acid, boracic acid or corrosive sublimate. This is placed over the wound in about eight layers, and covered with sheet gutta-percha or mackintosh, the whole being secured by an india-rubber bandage. The writer claims for this dressing the advantages of cheapness and portability, and thinks it will be found very serviceable in the field and in small hospitals. — *Lancet*, August 21, 1886.

#### SALICYLATED GELATINE FOR ECZEMA.—

R <sub>x</sub>	Acid Salicylic, . . . . .	10
	Gelatine, . . . . .	30
	Glycerine, . . . . .	10
	Water, . . . . .	30

Dissolve by heat. — *Journal de Med. de Paris*.

THE JUGULATION OF TYPHOID FEVER BY SULPHATE OF QUINIA AND LUKEWARM BATHS.—At the session of the Académie de Médecine of August 3, M. Péchollier, of Montpellier, read an essay thus entitled. He concluded that, by its antizymotic action, quinine, when associated

with lukewarm baths, shortens the course of typhoid fever to a mean of from fourteen to sixteen days. He bases his statements upon over sixty-five consecutive cases, speedily cured, without any failure.—*L'Union Médicale*, August 5, 1886.

TREATMENT OF BLENNORRAGIA.—No. I. Dr. Awssicidjiski has treated forty cases of blennorrhagia in the following manner: During three or four days he administered 5 grammes (75 grs.) of salicylate of soda dissolved in 180 grammes of infusion of linseed, and ordered warm sitz baths. As soon as the burning sensation had disappeared he prescribed injections of boric acid two per cent. to the number of four to six daily for four days. Finally he ended by sublimate injections of 1 in 6,000 until a cure was established.—*Journal de Med. de Paris*.

DR. KOCH tells the following story about the origin of his celebrated cultivative experiments. He had been, like many others, trying various kinds of decoctions and infusions, when walking along the street one day he noticed a potato covered with a fungus growth, and it occurred to him that disease germs might thrive equally well on the same nutriment. This was the beginning of his wonderful series of dry cultivated experiments, and thus Professor Whittaker expressed it, at New Orleans: "The potato was to Koch what the apple was to Newton."

TRACHEOTOMY IN DIPHTHERIA.—In cases where tracheotomy is to be performed, Gaillard recommended the ordinary trocar and cannula, puncturing with a quick thrust and semi-rotation and moderate and equable pressure. Hæmorrhage is avoided. Another good plan is to use an ordinary triangular pointed lancet heated to white heat. The wound is not so apt to be covered with false membrane, and the patient being in a semi-asphyxiated state, as a rule, little pain is felt.—*Dr. Watt, in Daniel's Medical Journal*.

PRURITUS ANI.—This is readily controlled according to M. Gaellety (*Bulletin de Therap.*) by tepid lavements with one per cent. solution of boric acid, compresses of starch water and oxide of zinc ointment (one part of oxide to five of vaseline). If very severe, a pledget of cotton soaked in cocaine solution may be used.

DR. FLEISCHL, of Vienna, is recently reported to have found in cocaine a rapid and satisfactory cure for alcoholism, morphinism, and allied habits. The nervous symptoms which arise upon either withdrawing the drug abruptly or by degrees are treated by the hypodermic administration of the muriate of cocaine. It is claimed that in ten days a cure may be effected. The dose is from a quarter to a half grain dissolved in water.

LUPUS ENYTHEMATOSUS. — Brocq (*Journal de Med. de Paris*) reports a number of cases successfully treated by a paste of equal parts of white vinegar and yolk of egg. The mixture, after standing twenty-four hours, is penciled on every second, third or fourth evening. An energetic method is to apply a paste of vinegar and hard-boiled yolk of egg, leaving it on all night, and in the morning washing with black soap.

DIPHTHERIA. — Professor DeLaskie Miller recommends:

R <sub>y</sub>	Tinct. ferri chloridi, . . . . .	3j.
	Potas. chlorat., . . . . .	3ij.
	Acidi hydrochlorici dil., . . . . .	mxx.
	Tinct. capsici, . . . . .	3j.
	Morph. muriat., . . . . .	gr. ss.
	Syr. limonis, . . . . .	5xxij.

M. Sig. — Give a teaspoonful every two or three hours, according to the urgency of the symptoms.

URETHAN AS AN ANTIDOTE TO STRYCHNINE. — Some interesting experiments have recently been made by Professor Coze on the physiological effects of urethan. It was clearly shown that in frogs the urethan had an antagonistic effect to strychnine, and it is probable that it may be found of service in strychnine poisoning and in tetanus.

SWEATING FEET. — For three days bathe the feet for half an hour at a time, morning and evening, in tar water. At the end of the third day the pediluvia are omitted, and the soles of the feet are painted once a day with perchloride of iron. After four days more the epidermis is dry and hard. Complete cure has followed this simple treatment.

PARALDEHYDE. — Summer (*Neurol. Central*) states that paraldehyde must be given cautiously in alcoholics, as it causes cerebral congestions and phenomena of vaso-motor paralysis. He has noticed a profuse scarlatiniform erythema as a result of taking 4 grammes in 6 days. — *Bull. de Therap.*



## Book Notices

---

OUTLINES OF THE PATHOLOGY AND TREATMENT OF SYPHILIS AND ALLIED VENEREAL DISEASES. By Hermann Von Zeissl, M.D., Late Professor at the Imperial-Royal University of Vienna. Second Edition, Revised. By Maximilian Von Zeissl, M.D., Private-Docent for Diseases of the Skin and Syphilis at the Imperial-Royal University of Vienna. Authorized. Translated with Notes. By H. Raphael, M.D., Attending Physician for Diseases of Genito-Urinary Organs and Syphilis, etc. 8vo. Pp. 402. Cloth. Price, \$4.00. New York: D. Appleton & Co. Cincinnati: R. Clarke & Co. 1886.

Professor Von Zeissl is, at the present time, one of the most distinguished specialists in Europe in the treatment of syphilis. He has devoted his entire life to the study of this disease in one of the largest capitals of Europe. In private and hospital practice, he has had an opportunity of studying the symptoms and treating thirty thousand cases. Surely there is needed no further testimony than these facts to attest the value of a work put forth by him on the pathology and treatment of syphilis.

In speaking of this work, the translator says—and we quote his language for the reason that it expresses our own views: "As a clinical observer of venereal diseases, and as a teacher, Professor Von Zeissl stood deservedly high in Europe. The concise and graphic description in this volume of the various forms of venereal affections; the accurate delineations of the different phenomena of the pathological lesions; the terse and detailed account of the symptomatology and characteristic manifestations of the various phases presented by the different specific diseases; the conscientious records of results obtained, bear evidence of the scientific thoroughness with which the investigations were pursued, and, therefore, must render the work a valuable guide to those desiring to study them."

The work is characterized by the prominence given to pathology, which gives it value as a means to the proper understanding of the diagnosis and treatment of the various venereal affections. As is generally conceded, German medical writers and investigators, more than those of other nationalities, are distinguished for the bias which they seem

to possess to study the pathology of the diseases to which they give attention. On this account, some are disposed to consider that, while their works are generally of great value in consequence of their pathological information, they are of little value from which to acquire knowledge in regard to treatment. But we do not assent to such views. While our German brethren may not be as practical as American or English writers, yet they undoubtedly deduce from their pathological investigations oftentimes most valuable facts as regards treatment. Indeed, there can not be anything like scientific treatment of disease which is not founded upon a knowledge of pathology.

The work before us is divided into three sections. After considering the venereal contagions, the author enters upon Section I., which is devoted to "Gonorrhea (Tripper), Venereal Catarrh." Nearly one hundred pages are taken up in the consideration of this form of venereal disease, every phase of the malady being treated. Section II. follows, in which is discussed "Soft Chancre or Chancroid." Section III. is devoted to "Syphilis," the most interesting and important of all the forms of venereal disease. The consideration of this disease occupies nearly two-thirds of the volume.

While the work may not contain much that is new, for, as the reviser, the son of the author, says, "It was not the design that it should spread any new doctrine," yet it will be found to contain a well-digested exposition of venereal affections, exhibiting quite fully the views of the most recent investigators and the most approved methods of treatment.

---

A LABORATORY GUIDE IN ANALYSIS AND TOXICOLOGY.—By R. A. Witthaus, A.M., M.D., Professor of Chemistry in the Medical Department of the University of the City of New York; Professor of Chemistry in University of Vermont; Member of the American Chemical Society, and of the Chemical Societies of Paris and Berlin, etc. New York: Wm. Wood & Co. Cincinnati: Garfield.

This little work is arranged for convenience of reference and study—each leaf being printed on one side only, and the book opening from the ends. The seventy-five pages, therefore, constitute that many leaves.

The work is devoted exclusively to the chemistry of the

urine and of poisons. In treating the urine, qualitative analysis is first explained, after the general appearance of normal urine has been described. In this part of the work there are numerous engravings of the instruments that are employed in the work, with a description of using them. There will be found also the latest and most approved methods of testing for blood, bile and albumen in the urine.

Then follows next in order an account of the method of making Quantitative Analysis of the Urine. The first in order in this department is to determine the degree of acidity or alkalinity of the urine by means of solutions containing known quantities of oxalic acid and of caustic soda. In this department there are also cuts of all instruments necessary to be employed.

Urinary deposits come next in order, very accurate illustrations showing the appearances of the various kinds as exhibited by the microscope. These, of course, can be determined by chemical tests, but the speediest method of doing so is to obtain a view of them by the microscope.

Next follows the Detection of Poisons, mineral and vegetable, as arsenic, mercury, lead, sulphur, strychnia, hydrocyanic acid, etc. Of course, the mode of detecting poisons is set forth very fully in works upon chemistry, but in this little work we have the description of the latest and most approved methods placed together and arranged for easy reference. Students and physicians will find this work a very useful and convenient one. Its descriptions are as full as could be desired, and at the same time there is no unnecessary verbiage.

---

THE MEDICAL NEWS VISITING LIST, 1887.—Thirty Patients Per Week. 12mo. Pp. 240. Philadelphia: Lea Brothers & Co.

( This Visiting List, introduced to the profession the latter part of 1885, has proven to be a success. ) It is issued in four styles—*Dated*, for thirty patients per week (1 vol.); for sixty patients per week (2 vols.); for ninety patients per week (3 vols.); and *Undated* (perpetual, 1 vol.). The price is \$1.25 per volume.

The volume is closed by a lap of the back; the edges gilt. There are the usual pages ruled, so as by signs to enter account of daily practice throughout the whole year. The first forty-eight pages contain reading matter, as direc-

tions for ligating arteries, therapeutic tables, table of doses, poisons and antidotes, method of carrying on artificial respiration, incompatibles, table to find end of utero-gestation, etc.

Besides what we have mentioned, there are blank pages, properly ruled for the various purposes, for Clinical Record, Consultation Practice, Obstetric Engagements, Obstetric Practice, Deaths, Addresses of Patients, Addresses of Nurses, Cash Account.

There is an erasable tablet at the back of book; also a pocket for prescription paper and a loop for a pencil.

(Every practitioner should have a visiting list. It will save a hundred times its cost. For, being able to be carried in the pocket, charges can be made at the time of performing any service. Notwithstanding the number of pages of the one on our table, the very thin leaves, though the paper is of the best quality, make it very light and of little thickness. )

---

THE PHYSICIAN'S VISITING LIST (Lindsay & Blakiston) FOR 1887. The Thirty-sixth Year of Its Publication. Philadelphia: P. Blakiston, Son & Co. Cincinnati: R. Clarke & Co.

We have received this work just as we are closing up the journal, and have but little time to give it attention. But having been before the profession so long as it has been, it requires but little notice, beyond the announcement of its appearance; for nearly every physician is well acquainted with it.

We have always admired the Visiting List of Lindsay & Blakiston in consequence of the small amount of reading matter it contains, and its lightness. It measures  $6\frac{1}{8} \times 3\frac{7}{8}$ , and the volume for twenty-five patients per week weighs only  $3\frac{1}{2}$  ounces.

Its contents are such as usually belong to visiting lists: Calendar, Table of Signs, List of Poisons and Antidotes, Dose Tables, Marshall Hall's Ready Method in Asphyxia, etc., pages ruled for keeping an account of daily visits to patients for every day in the year, also ruled for obstetric engagements, vaccination engagements, record of deaths, of births, cash accounts, for general memoranda, addresses of patients and nurses, etc.

Notwithstanding the great increase in the number of Visit-



ing Lists, the one of L. & B. preserves its popularity. It was the first published.

---

## Editorial.

---

A UNIVERSAL LANGUAGE.—Since the modern languages have attained to a high state of cultivation, the writers of each nation write in their own language. Medical men, jurists, theologians, scientists and literati generally, at the present time, no longer record their reflections and the results of their investigations and observations in a dead language, like the Latin, as they did three or four hundred years ago, but make use of their vernacular in which to indite whatever they may wish to say in order to be read. The reason alleged for no longer using the old Roman tongue as a vehicle of learning, when it is desired to communicate by writing, is that our modern languages are no longer rude, unpolished and inexact, but have become cultivated, and their words and idiomatic expressions have well defined and established meanings; and as they are learned from the earliest childhood, so that the words which are “the signs of our ideas” are with us as the ideas themselves, bringing them before us at the mention of them without a reflection, we can use them with much greater readiness in putting our thoughts into written expressions than we can a language, dead or living, that has been acquired by study after we have attained adult age, or nearly so.

No one, of course, will deny that an individual can talk and write more readily in his vernacular language than he can in one that has been acquired. But when an individual writes, he does so for the benefit of others—for the instruction of more or less individuals. When St. Paul wrote his grand epistles it was for the purpose of edifying all Christians; and as he was the apostle of the Gentiles they were to come from every nation upon the earth, speaking every language. Plato, Aristotle and Hippocrates wrote in Greek; Cicero wrote in Latin, but what they wrote was not interesting and edifying to Greeks and Romans only, but was equally so to the intelligent and cultivated of the whole world.

But to come down to modern times. Are the writings of the German pathologists, physiologists, chemists, surgeons, obstetricians and gynecologists interesting to only

those who speak the German language? Most assuredly not. The translations of their works are purchased and read with as much avidity by Americans and Englishmen as the German editions are by the Germans themselves. And with what increased satisfaction does an American, who can read German, having acquired it, read the writings of a German *savant*. But German medical literature is not more sought for and studied than French medical literature. The writings of distinguished French physicians and surgeons are to be found in almost every medical library of this country.

In every department of learning the writings of *savants* of every country and language are eagerly sought and read by the learned of every other country. The English pathologist seeks to be familiar with the writings of pathologists not only of England, but also with those of France, Germany, etc.; and we find those of France, Germany, Italy and Russia quoting from those of America and England.

During the time of Erasmus, Calvin, Luther, Melancthon, Zwinglius, all learned men, of every nation, wrote in Latin, so that when a work was published in England the *savants* of France, Switzerland, Germany—of all Europe—could easily read it. It was not necessary, at that time, for those who were not of the same nation as the author to wait for a work to be translated into their vernacular in order to be able to read it. Latin, until only three or four hundred years ago, was the adopted language of learning, and all learning—not merely that of theology and law, but also of philosophy, medicine and of the sciences generally—found expression in it.

It seems to us that, at some future time, the learned of the world will have to agree upon some language as a universal language. A person might, without great difficulty, learn one or two languages besides his own, but it would be too great a task to attempt to become familiar with the intricacies of a half dozen or more. Translations can not be relied upon, for only a few comparatively are made of the publications in one language into that of another; and then often they must be waited for a long time. As learning advances in all the departments of knowledge and civilization, and enlightenment makes progress in the world, adding to the number of cultivated people of different languages, the greater will the need be felt of one language

by which the learned will be able to communicate with one another by writing. The Roman Catholic Church, as is well known, continues to hold on to the Latin language as the language of the whole Church. All of its dogmas, legislative acts, encyclical letters are expressed in it the same as a thousand years ago.

It has been suggested for quite a number of years to make the English language a universal language—the language of letters and science. There is no doubt that the English language is spoken by more people than any other language; for it is not only the language of Great Britain, the United States and Canada and Australia, but it is spoken largely in Hindostan, the southern parts of Asia, the East Indies and throughout the islands of the world. But French has great prestige throughout Europe. It is the language of commerce everywhere; and has been, until recently, the acknowledged language of the European courts. But German has of late years been disputing the claims of French as the universal language of Europe. It is doubtful whether any living language could be selected by general assent as a universal language.

It occurs to us that as Latin was at one time, for many hundred years, the universal language of the learned, it might again be adopted as the language in which the learned, who write for the learned only, might express themselves. A work, then, written by a German pathologist would be at the service immediately of every pathologist of every nation. There would consequently be no delay in waiting for it to be translated before those who were not acquainted with the language in which it was written could read it. The one language being the medium of writing with all *savants*, there would also be no need of learning several languages in order to know what is being written in the different countries of the world.

The Latin language has the reputation of being a difficult language to learn. We have met with not a few persons who, having studied Latin two years in the preparatory department and four years in college, could not read two sentences in Cicero that they had never read before—we mean without a grammar and dictionary at their side. But the difficulty in learning Latin is owing entirely to the improper method of teaching it. If it is studied like the modern languages are studied by those who feel a necessity to learn them, its acquisition will be easy enough.

It may be objected to Latin that it has not the words to express scientific terms as they now abound in the present advanced state of the sciences—and also that it is deficient in other expressions which are employed in other departments of knowledge. Of course not, for it was a dead language before these terms and expressions had occasion to be used, but new words expressing these could be coined and added to it, as the word telegram and hundreds of other new words were coined and added to the English language.

---

AMERICAN HUMANE ASSOCIATION.—This organization is now holding its tenth annual session in Cincinnati. It is composed of delegates from societies for the prevention of cruelty to children and animals throughout the United States and Canada. There are three hundred sections of these organizations in the two countries mentioned, and about a hundred delegates are in attendance upon the sessions of the Association now being held.

We regard this Association, and the societies whose delegates constitute it, as the noblest of organizations. As physicians are humanitarians by virtue of their profession, we consider that no association, not a medical society, is so worthy of their consideration as this one. It has not, of course, to do with disease; but it has to do with cruelty, which, like disease, is a great bane to human happiness. Cruelty ravages and destroys—it weakens and undermines the physical systems of its subjects, and makes brutes of those who indulge in it—perverting the best feelings and dwarfing the mind. In fact, there is great similarity in the effects produced by disease and cruelty. Both are opposed to the welfare of the race, cruelty having a double action, being prejudicial both to the recipient and to the one who administers it.

The various societies which constitute the American Humane Association have been organized for the purpose of protecting from cruelty those who can not, from necessity, protect themselves, as the lower animals and children. Nature has left these defenseless, so far as possessing any power in themselves of defence, for the natural instinct of love of offspring, usually a very powerful emotive function, is generally sufficient to induce parents to treat affectionately and considerately their children; and the feeling of self-interest, in a well-balanced person, can be relied upon to



produce kindness to such lower animals as men have about them. But there are thousands of human beings who are exceedingly deficient in their moral emotions, and can not be depended upon to be governed by the feelings which impel to acts of kindness and induce protection of offspring.

But a vast amount of cruelty is the result of ignorance or comes from thoughtlessness. Poor brutes, no doubt, are oftentimes let go without water, for no other reason than that those who have charge of them do not understand how great suffering is produced by thirst. Horses are sometimes overloaded and goaded to pull loads too heavy for them, because their owners do not appreciate the injury that is being done them. A society, therefore, organized for the prevention of cruelty to animals exerts a beneficial influence upon the community around it by attracting attention to the subject, and exposing methods of cruelty that before had not been observed or understood.

In all States there are grand juries, prosecuting attorneys and jails, that criminals may be punished who have committed offenses against their fellow-men or against property; but until societies for the prevention of cruelty to animals were organized, there had existed no provisions for the protection of dumb brutes against cruel treatment, or to look after deserted children. The poor horse that fell down in its shafts in vainly striving to pull a load too heavy for it, and its brutal master standing over it, beating it with a great club, vainly neighed for help. It was regarded as the rightful slave of its tormentor—that it itself was only a brute and as such had no rights—and with this reflection men and women passed by without a protest often. But such scenes are seldom witnessed now, for cruel men know that to enact such would result immediately in their incarceration in the workhouse. Little children now—waifs as they are called—who are deserted by unnatural parents, or are beaten, starved and persecuted by them, have their feeble cries for help answered by a society's agent, who carries them to some good home, and then returning finds their parents and hands them over to the police judge to be dealt with as they deserve.

It would require a volume to describe the good work that has been done by the various societies of S. P. C. A. Not only in the few years of their existence have thousands of individual instances of cruelty to animals and young children been redressed by them, but wholesome laws in nearly

every State have been enacted, through their influence, against cruelty, by which means millions of dollars have been saved to the country; they have compelled railroad companies and other corporations to see to the watering and feeding of cattle in transit, though neglected by their owners; they have given attention to cattle on the plains, where every winter thousands have been permitted to die from cold and starvation. The laws that they have caused to be passed for the protection of animals designed for food have tended greatly to make such food more healthy and less liable to be diseased.

It can not be estimated the great good that has been done the boys and girls in the way of educating them in acts of kindness to the lower animals, by the organization of the Bands of Mercy among them by the Societies for the Prevention of Cruelty during the last two or three years. Thousands of boys and girls have joined these Bands, and the effect can not be otherwise than to refine and elevate. A boy or girl taught to be kind to brutes will never make a bad man or woman.

We hope every physician will feel it his duty to do all he can to advance the good work. Physicians, as we have said, by virtue of their profession, are humanitarians, and are identified with the welfare of the race, and should, therefore, feel it incumbent upon themselves to do all in their power to elevate and make better.

---

THE COCAINE CRAZE.—In an article entitled "Sensationalism in Therapeutics," Dr. C. H. Hughes (*Weekly Medical Review*) says:

The truth about cocaine is that it is a tonic and stimulating exhilarant of some power in melancholia, mental depression and nerve weariness.

That it acts rapidly but much more evanescently than morphia.

That, excessively used, it intoxicates and converts melancholia into mania.

That, given largely in the upright position, it is capable of inducing vertigo; whether, as Dujardin-Beaumetz thinks, by inducing anemia is not proven.

That, as an antidote to alcoholism and its effects it is not equal to morphia.

That it is not equal to morphia as a tonic in melancholia or as a narcotic in certain states of nervous debility.

That in equal doses it nauseates more certainly than morphia.

That it is not an antidote to meconophaggism, though beneficial if judiciously used and timely abandoned.

That it may be used with advantage, if carefully given, in the withdrawal of opium and the cure of the opium habit, as one of many substitutes, but can not be alone relied upon.

That it intoxicates some persons and poisons them.

That its continuous use is difficult to break off.

That it is probably capable of developing permanent madness, like similar intoxicants, as a few doses occasion temporary insanity.

That it is a dangerous therapeutic toy, not to be used as a sensational plaything.

That it will probably help to fill rather than deplete the asylums, inebriate and insane, if it should unfortunately come into as general use as the other intoxicants of its class.

As an intoxicant it is more dangerous, if continuously given, than alcohol or opium, and more difficult to abandon.

---

THE LONG-BEARD HABIT.—The *Medical Record*, of New York, has been waging a war upon long beards. It regards them unseemly, and besides says they are often carriers of contagion. In its issue of the 13th, it publishes a letter from a correspondent, which will give an idea of what the opponents of long beards have to say about them. We copy:

"*Sir*: It appears to me that your correspondent, Dr. R. J. Curtiss lacks the sense of humor and of proportion. In his argument for beards he seems to lay most stress upon the question of diverting physiological energies, and says nothing about the serious aspect of the long beard, viz.: its power of carrying contagion. I fully agree with your editorial upon this point. Long beards are dangerous as infection-carriers. I am sure that I know of several cases in which infective fevers have been carried by their means, and I think that every physician in large general practice must know of similar cases. I trust you will renew your attack on the long beards until they are shortened or cut off.

"Yours, ANITAS."

CONFERRING THE DEGREES OF LL.D. BY HARVARD.—Harvard University recently held a jubilee celebration. If we remember rightly it celebrated its 250th anniversary. President Cleveland and many other distinguished personages were present. In conferring degrees, the degree of LL.D. was conferred upon three medical men, as we learn from the newspapers, viz :

“Joseph Leidy, anatomist, biologist, a leader and exemplar among American naturalists, Professor of Anatomy in the University of Pennsylvania.

“Silas Weir Mitchell, physician, physiologist, author.

“John Shaw Billings, Surgeon in the United States Army, student and teacher of public medicine, medical bibliographer.”

We remember Dr. Billings when attending lectures at the Medical College of Ohio, from which institution he graduated. He usually occupied from two to three chairs while listening to a lecture.

---

AN INELEGANT MIXTURE.—The following prescription was lately written for a patient, and the attempt to dispense it was a miserable failure :

Ferri et quin, citias, . . . . .	3 iss.
Sodii salicylas, . . . . .	Div.
Syr. limonis, . . . . .	3 i.
Aqua, . . . . .	3 ij. m.

The difficulty with this mixture is that decomposition occurs between the two chemicals, and salicylate of quinine is formed, a very insoluble salt, and which absorbs so much of the liquid as to form a dense mass, defying all efforts to mix it through the fluid, so that it can be readily administered. The salicylate should be given as a separate remedial, and the dose alternated with the quinine tonic.—*Pharmaceutical Record*.

---

“WITH OR WITHOUT.”—The physician who is convinced of the value of the Pneumatic Cabinet in pulmonary disease is afforded a chance to purchase the instrument, either from the original company or from a concern which has lately undertaken the manufacture.

The old company claim to have covered the instrument with patents, and have not only commenced suit to enjoin their rivals, but declare that they will proceed in the same



manner against any person using an instrument not bought from them.

In one case, it would seem that a doctor can only get a plain cabinet; in the other, he is assured of a lawsuit as well.

---

DECEASE OF A PHYSICIAN.—We regret very much to have to announce the decease of Dr. Julius F. Miner, aged 63 years. He was eminent in his profession, and ranked for many years as one of the ablest surgeons in Western New York. He was born in Peru, Mass., in 1823, graduated in the Albany Medical School in 1847, and settled in Buffalo in 1855. He was, for a number of years, Professor of Special and Clinical Surgery in the Buffalo Medical College, and editor of the *Buffalo Medical and Surgical Journal*. He wrote well and made his journal very interesting.

---

AN IMPORTANT DISCOVERY.—The *Indiana Medical Journal* says that Dr. Miles T. Porter, Professor of Anatomy in the Fort Wayne Medical College, in an address at the Commencement exercises in said College, made the following statement: "A physician can now learn medicine from observation, without having a thorough scientific foundation."

We wonder if this discovery cost Dr. Porter much wear and tear of mind.

---

AN OLD WOMAN.—A woman, named Mrs. Dietrich, recently died at the good old age of one hundred and twenty-six years in Savoy. She was born in Basle in 1760, was married for the first time in 1783, and for the third and last time in 1798. Up to the age of one hundred and nine years she could see perfectly well and was in the possession of all her faculties, but during the last years of her life was in a semi-stupor most of the time.

---

JEFFERSON MEDICAL COLLEGE.—We have understood for some time that considerable dissatisfaction has been existing in the faculty of *Jefferson Medical College*, of Philadelphia. We now learn from an exchange that there will soon be a reorganization of the faculty, Dr. Roberts Bartholow resigning.

# THE CINCINNATI MEDICAL NEWS.

VOL. XIX. No. 228.  
Old Series.

DECEMBER, 1886.

VOL. XV. No. 12.  
New Series.

## Original Contributions.

### The Prognosis in Cases of Cardiac Disease.

Written for CINCINNATI MEDICAL NEWS. By Medicus.

AT the recent meeting of the British Medical Association, held at Brighton, from the 10th to the 14th of August, 1886, there was read, by Sir Andrew Clark, of London, before the Section on General Medicine, an exhaustive paper entitled "Cases Where Disease of the Heart Had Existed Upward of Five Years." The paper itself, and the debate thereon, brought out much that was progressive, regarding the prognosis of organic cardiac diseases—showing a step forward by the profession in its views of the "probability of life" in ailments of this class. To those who wish a full synopsis of this interesting paper, and the ensuing discussion thereon, I will say that the same can be found in the issue of the *N. Y. Medical Record*, for August 28, 1886. This was a subject full of the deepest concern to the writer of the present communication, as will be seen further along, and I followed it with emotions difficult of analysis or expression. However, contrary to the early impressions I had formed, both through instruction and reading, in my novitiate, the views of those who entered on this discussion were that organic diseases of the heart, even of grave moment, and such as are readily diagnosticated, or even imminently threatening, are not necessarily incompatible with average longevity or even ripe old age *after* the inception of the affection. Many cases were cited by the speakers in support of the proposition that a pathological heart state may so adapt itself to its de-

ranged condition as to accustom both itself and the body in general to the existing difficulty, and comfortable health for many years follow the first recognized deviation from a healthy standard of action. And it is to emphasize this fact, and add one more—yea, two more—to the list, going to disprove the old view of *speedily* progressive fatality in all organic or valvular diseases of the heart, that I contribute my mite by this communication.

About fifteen years ago I entered upon the practice of medicine. Previous to that time I had been a young man of average vitality and health, but subject to slight "rheumatic" pains while growing up, to which no special attention was paid. During my medical course I had been a very close student, taxing to the utmost my powers of endurance, by late hours and confinement. I was also the valedictorian of my class and struggling hard for first honors in general standing, with several bright competitors to meet and measure lances with. For nearly a year after graduation I continued an indefatigable student, as far as leisure permitted (and my practice was not so laborious (?) as to demand all of my time). During this year I developed indigestion, palpitation and dyspnœa on exertion, but thought it all functional from my dyspepsia, and that it would prove evanescent. At last, however, I got so bad that insomnia superadded itself to my other troubles, and I reluctantly sought medical advice. Dr. H., an old U. S. Examining Surgeon, and with ample auscultatory experience, examined me—at first cursorily, then, as if his attention were riveted by something unexpected, he got down to serious and rigid physical scrutiny. Having finished, he gravely remarked, "Doctor, you are a physician. Do you want me to tell you the exact truth?" I answered affirmatively, and he said, "Well, sir, you are a young man, but a man of family, and, in order to arrange your business affairs, ought to know that you are a victim of a serious aortic regurgitant lesion." "How long will I live, Doctor?" "That I can not tell, but the valvular disease is extensive, dilatation has already progressed to a dangerous degree, and you know, of course, that a liability to sudden death hangs over you." This he said sadly, but judicially, and further counseled me to abandon practice, with its fatigue, anxiety and exposure, as calculated to speedily terminate my existence. I went home and put my business affairs in shape for an administrator, gave up study, but was not financially able to quit practice.

However, I brooded over my shattered hopes, lost interest in everything but my family, grew despondent and melancholy, though I studiously hid my state of mind from others and nursed my woe in secret. A dozen physicians of more or less ability—one a professor of physical diagnosis in a neighboring city, and another an examiner of police—closely interrogated my chest during the next eight or ten months, and practically confirmed both the diagnosis and prognosis. At last I pulled up stakes and took my wife a thousand miles back among her relatives, so as to have her and the children with kinsmen after my demise. Three years from the first examination was the longest lease of my life given me by any of those I consulted, and most of them cut this off half or more.

My new home was in a town of 1,500 inhabitants, and six established doctors administering to its sick. Mechanically I opened an office here. And then I philosophized—"If I am to die, why not enjoy life while it lasts, if only for an hour. I will get the honey while I pass the bloom, and perhaps I may make myself useful, if only for a short time and in a limited way." So I went calmly to work. I suffered frequently and severely with my heart. Faced the contingency of falling dead by the roadside on some of my lonely night rides—never left home but I thought that I might be brought back a lifeless body. Business grew rapidly with me. All seasons, all weathers found me riding. A year later I resumed my studies. Success met me. From nothing I built up a practice and a fund—a library and fine outfit of instruments. For about thirteen years I have worked laboriously in the professional harness which I resumed, have distanced *all competition*, acquired the *best* outfit and library within a radius of a hundred and fifty miles, have the largest practice and medical income in the county, hold official professional trusts, and have a pleasant home furnished with many conveniences and luxuries, a family now nearly grown, and a bank account with a snug balance in my favor. I have *enjoyed* life ever since I began to live only in the present moment and not for a material future—am in fine flesh and strength to-day, and bid fair for twenty years of activity yet. I never feel my pulse now or auscultate my chest with the stethoscope, as of old. The heart it still damaged, the disease is still there, I am conscious of it, and it may dash me into eternity any instant; but it seldom obtrudes itself on my attention of late years, and the system



has so adapted itself to the damaged state of affairs that I enjoy a very comfortable existence. Do you wonder that I have been intensely interested and active in studying, clinically, in others, this subject of heart diseases? And do you wonder that I determined to live on just as long as this machinery of mine can be "run with a cracked piston rod"? Well, I cite my case vividly and in detail to impress on the reader that a life of activity, of pleasure and of usefulness may be lived by the victim of an organic disease of the valves and muscular structure of the heart, not briefly, but for years, and in the face of exposure, fatigue and hardships, such as are incident to a physician's experience. And I wish also to impress the desirability of not snatching all hope from such a victim by informing him of his inevitable doom at an early day. He may escape as fortunately as I have thus far done, as I have seen others do, and as the various speakers before the British Association had also seen cardiac patients do.

One more case, *out of a number* in my practice, to illustrate my point, on account of its striking features, and I am done. A young man, a Hercules in build and physical power, a laborer and poor, came into my office in June, over six years ago. He was panting with violent dyspnœa, face puffy, countenance haggard, mucous surfaces congested, a stuffy cough, and walking slowly and with much effort. Briefly his history was as follows: While "cradling" wheat four days previous, and trying to outdo his fellow cradlers, he suddenly felt a keen pain in his breast, his breath got very hard, he doubled up and had to stop work and lie down. The heart palpitated violently for a long time while he lay in the shade of a tree. With difficulty and assistance he got on a wagon and went home. Thought he would get all right in few days, took dose of pills, rubbed the breast with some liniment, but got very little if any better, and now sought medical advice. I carefully examined him that day and at intervals for several weeks. He had ruptured one of the aortic leaflets during his strain in the field, regurgitation resulted, the heart staggered under its new experience, mitral obstruction and pulmonary stasis followed, and my patient was really in a deplorable plight. With a fellow feeling *my* heart swelled (figuratively) for him, particularly as he had a young family dependent on him for the necessities of life, and *SUCH* a prospect ahead! Well, I explained to him the trouble, quietly and calmly. I counseled him what to do.

Encouraged him as much as I could, and put the hopeful side of the picture before him. But I emphatically laid stress on the injunction, that *if* he got able to work he must *absolutely* do only the lightest of labor, avoiding all kinds of strain. In three months he began to work again. In four he was chopping cord-wood. Since then, and up to the present day he has mauled rails, hauled saw-logs and everything falling to the lot of a laboring man. Recent examination has demonstrated the continuance of the valvular mischief, but the little curtain does fairly well, if it *is* imperfect, and a compensatory hypertrophy of the cardiac muscle (which is readily made out) renders a laborious life possible for him, whose very existence depends on labor. He lives and is strong, healthy and happy. And this case is only exceptional in its unique details, not in its ultimate course. So we must surely revise, as urged in the debate at Brighton, our former notions and teachings about the duration of life in the face of existing and undoubted organic diseases of the heart.

November 4, 1886.

---

## The Human Ear.—Historical Sketch of Its Anatomy.

---

BY FRANCIS DOWLING, M. D., CINCINNATI,

Late of Professor Galezowski's "Ophthalmic Clinique," Paris, France.

---

IN the Royal-Saxon Library of Leipzig, Germany, is an ancient work, written upon papyrus three-fourths of a yard wide and something over twenty yards long; it is entitled, "The Hermetic Book of the Medicine of the Ancient Egyptians." It was found with the bones of an Egyptian resurrected in 1861, and had been buried more than thirty-four hundred years. The book is one of the six medical works named by Clement of Alexandria.

Among the many subjects treated of in this large work is a monograph upon "medicines for ears hard of hearing." No mention is made of the anatomy of the ear in this or in any other work of the ancient Egyptians; and if they knew anything about this subject, it has not been handed down to us.

Hippocrates knew very little about the anatomy of the ear.

Alcmæon, a pupil of Pythagoras, 500 B. C., is said to

have had a knowledge of the art of dissecting the human body, and to have been familiar with the construction of the ear. Galen says he was the first one to write a work on anatomy. He is said to have anticipated Eustachius in the discovery of the Eustachian tube.

Aristotle, a pupil of Plato, the teacher and friend of Alexander the Great, was familiar with the drum of the ear; he also probably had a vague idea of the Eustachian tube. He made many dissections of animals, and made a number of important discoveries in anatomy.

The ancient Greeks made little progress in anatomy. They were strictly enjoined from dissecting the human body, for the reason that, according to their belief, the soul of the departed wandered around on the banks of the river Styx, unable to cross over until the body was buried; hence, whenever an orthodox Greek accidentally found a human bone, it was his religious duty to strew a handful of earth over it.

In the times of one of the great Ptolemies, of Egypt, during whose reign dissections of the human body were practiced in Egypt, Essistratus, a colleague of Heraphulus, discovered that the nerves originated in the brain—the nerve of hearing is among those mentioned by him. Marinus, the preceptor of Galen, called the acoustic and facial nerves one under the name of the fifth pair.

Galen made little advance in anatomical studies; he showed, however, that his preceptor, Marinus, was mistaken in supposing that the facial and acoustic nerves were one, and demonstrated that the nerve of hearing entered the meatus auditorius internus, a passage thought to be impermeable by his preceptor.

From this period on (A. D. 200), we have an almost unbroken night of thirteen hundred years. The dawn of anatomy came again about the beginning of the fourteenth century, when Louis Mondinus, a professor of anatomy at Bologna, wrote a work on anatomy and dissected two female cadavers. His labors were soon stopped, however, by Pope Boniface VIII. issuing his celebrated *bull*, placing the ban of the Church on all who desecrated the human body by dissection.

Andreas Vesalius, styled the Reformer of Anatomy, was born in Brussels in 1514. After having completed his anatomical studies in Paris under the great Sylvius, he traveled through Italy, giving anatomical demonstrations in the

universities of Pisa, Bologna, and others. He created such a sensation that the Senate of Venice elected him professor of anatomy in Padua, at the age of twenty-three years. He lost his life by shipwreck on his way home from Jerusalem, where he was compelled to go to do penance for having dissected some bodies in Madrid.

In that celebrated collection of art gems, the Pitti Palace in Florence, is the portrait of a man with a thoughtful, somewhat somber but classical face, scholarly in every outline. It is that of the great anatomist, Vesalius, whose memory, like the coloring of his portrait, comes down to us mellowed by the centuries that have gone by. Vesalius contributed a great deal to our knowledge of the anatomy of the ear. He described the long process of the malleus, also the Eustachian tube, or passage from the middle ear to the pharynx; likewise, the vestibule and the semicircular canals.

No less than three anatomists claim the honor of having discovered another of the little chain of bones of the middle ear (stapes)—Ingrassia, Columbo and Bartholomeus Eustachius. The weight of evidence, however, seems to be on the side of Ingrassia's having discovered the bone.

Gabriel Fallopius, a nobleman of Modena, a pupil of Vesalius, born in 1523, gave a more accurate description than had as yet been given, of the cavity of the tympanum, as well as of the two fenestræ and their communications—the one with the vestibule, the other with the cochlea. He was also the first to demonstrate that the mastoid cells communicated with the cavity of the tympanum. He discovered, likewise, the canal which transmits the facial nerve in its passage through the cavity of the tympanum—the *acque-ductus Fallopius*.

Bartholomeus Eustachius, born in 1500 and died in 1574, at which latter period he was engaged in finishing his magnificent anatomical plates, which were lost until one hundred and fifty years afterward when they were found in Rome, and published in 1714. He discovered the stapedus and tensor-tympani muscles; he also gave a fuller and more accurate description of the passage-way discovered by Vesalius—the Eustachian tube.

Constant Varolius, a professor at Bologna in 1575, whose name is so intimately associated with the anatomy of the brain, supposed that the muscles of the cavity of the tympanum were nerves, but subsequently admitted his error.



Fabricius, a professor in Padua in 1537, was the preceptor of the great Harvey, the discoverer of the circulation of the blood. He was an active contributor to our knowledge of the anatomy of the ear. He published a work on the anatomy of that organ in 1600, in which he gives a clear account of its anatomy as then understood.

Julius Casserius, a professor in Padua in 1605 and a pupil of Fabricius, described the fissures that make the cartilaginous portion of the Eustachian tube so flexible. He also gave a more elaborate and thorough description of the drum-head than had up to this time been given. He, likewise, was the first to describe the two and a half turns of the cochlea.

Du Varney, a Frenchman, who was court anatomist and instructor in this branch to one of the royal princes of France, was, according to the statement of reliable authority, the greatest ear anatomist of the seventeenth century. He gave a clear account of the ceruminous glands, the semicircular canals with the five openings into the vestibule, and the Eustachian tube.

This brings us down to the *eighteenth* century, where we find the name of *Antonio Marie Valsalva* as the most celebrated anatomist of his age, and, probably, of his century. He spent over sixteen years of his life in studying the anatomy of the ear, and for that purpose dissected more than a thousand heads. He described the attachment of the tensor-tympani to the Eustachian tube, also the muscle that opens the tube and moves the uvula; he also wrote a treatise on the ear.

Ivan Cassebohm, in 1730, published a monograph on the ear, in which, among other things, he described the cochlea and the development of the auditory apparatus of the foetus.

Rivinus discovered the foramen in the membranum-tympani which bears his name. Hyrtle, the distinguished anatomist of Vienna, thought, at first, that the foramen was merely a rent in a macerated membranum-tympani, but was finally convinced of his error. It was afterward described minutely by Prof. Berres in an article in the *Prager Viertel Jahreschrift*, and was thereafter acknowledged by anatomists as a constant anatomical condition.

Frederick Ruysch, born in 1638, was professor of anatomy in Amsterdam, and noted for his skill in injecting the small blood-vessels with so-called hardening preparations for the purpose of anatomical studies, in which department he ob-

tained a world-wide reputation; and was, in consequence, elected a member of the immortal *forty* of the Academy of France. Peter the Great, who made his acquaintance when at the height of his fame, bought his extensive collection of anatomical preparations, and, also, the recipé of his secret mode of making the injections, for the sum of 36,000 guildens in gold. A part of the fine preparations were destroyed on the sea-voyage to St. Petersburg, on account of the sailors having secretly drunk the alcohol in which they were preserved. Ruysch contributed to our knowledge of the anatomy of the ear by correcting the statement of Valsalva, that the chain of bones of the middle ear were not covered by periosteum.

Dominic Cotugno discovered the fluid of the labyrinth of the internal ear. He was the first one to demonstrate that the presence of this fluid in the labyrinth is necessary for the perception of sound. He described the canal opening into the vestibule, and also the one opening into the cochlea, which bear his name.

Antonio Scarpa, some thirty years after Cotugno's time, wrote a complete work on the anatomy of the ear; in which he gave an elaborate description of the fenestræ rotunda, the osseous labyrinth, the membranous labyrinth, and the distribution of the acoustic nerve in these cavities.

Alexander Munro, of the great family of Scotch anatomists, professor of anatomy in the University of Edinburg in 1797, wrote a monograph on the organ of hearing in man and other animals. He claims to have been the first anatomist to trace the auditory nerve within the cochlea, vestibule and semicircular canals.

Sir Everard Home, in 1800, gave an account of the membrum-tympani in a paper read before the Royal Society.

Samuel Thomas Sæmmering, the great anatomist, some eighty years ago, contributed a series of plates, illustrations of the anatomy of the ear, which, to this day, rank as masterpieces of their kind.

Henry Jones Shrapnell, in 1832, contributed a series of papers, which were published in the London *Medical Gazette*, in which he described the membrane which bears his name.

Thomas Buchanan, of Hull, in 1832, wrote a work on the anatomy of the ear.

Wharton Jones, the famous English surgeon, contributed an excellent monograph on the organ of hearing, published in the "Cyclopædia of Anatomy and Physiology."

This takes us, in our review of the anatomy of the ear, down to our own times; the names of Schlemm, Johannus, Toynbee, von Tröltsch, are of our own generation.

Huschke and Breschet examined the labyrinth more thoroughly than it had been examined up to their time. Jacobson, Arnold, Schlemm and Müller gave us more thorough and exact knowledge concerning the nerve tracts.

Toynbee, in 1851, began an investigation of the structure of the membrum tympani, and was the first one to describe the outer or dermoid layer of that membrane.

He also wrote a series of articles "on the pathological anatomy of the ear," which were published in the *Medico-Chirurgical Transactions*. These papers gave Toynbee a fame probably greater than any other anatomist of the age. Previous to this time, our knowledge of the pathology of the ear was not on a par with our knowledge of its anatomy; but by these papers of Toynbee's, it is placed on as sound a basis.

Politzer was led to discover his method of inflating the Eustachian tube and middle ear by a remark made by Toynbee, that the Eustachian tube was usually a closed canal; that muscular action was necessary to open it, and that swallowing was a simple way of accomplishing this.

Von Tröltsch, in 1856, began a series of investigations relating to the structure of the membrana tympani, the muscles of the Eustachian tube and the pathological anatomy of the middle ear.

Gerlach, in 1858, published a series of papers in the *Archives für Ohrenheilkunde*, in which he gives us the result of his investigations of the fibrous layer of the membrana tympani.

Lucae demonstrated that by placing a vibrating tuning-fork on the mastoid process, the membrana tympani and chain of bones were thereby set in vibration. The results of his experiments were published in *Virchow's Archives*.

In 1851, Corti gave a description of the rods in the lamina spiralis membrane, known as Corti's pillars. Corti was followed in these investigations of the structure of the internal ear by the distinguished anatomists, Kölliker, Claudius, and others, including the famous Hyrtle, of Vienna; so that we have arrived at a point now when the anatomy and pathology of the ear rest on as sound a basis as that of any other department of medicine.

On looking over the names of the distinguished anatomists

who have enlightened us in regard to the structure of the ear, it will be seen that about three-fourths of them are Italians; in fact, previous to the eighteenth century, about all the anatomical knowledge we received came from the anatomists of the Italian school. They may be truthfully said to have developed for us the "anatomy of the ear."

On visiting Italy some two years ago, I found myself one morning standing in front of that time-honored institution of learning—the University of Bologna. The sight of its venerable walls involuntarily brought to memory a few points connected with the history of its past and present.

It was here, in the fourteenth century, that human anatomy was first taught. Interwoven with the history of this institution are the names of Vesalius, Sylvius, Varolius, and others—names that are as familiar to us as our prayers. In the thirteenth century there were ten thousand students here, gathered from all quarters of the globe; now there are but a few hundred, mostly Italians. From the thirteenth to the sixteenth centuries this university, together with that of Padua and Salerno, virtually taught the world; to-day they, like Venice with its commerce, are known only for past greatness. Why the famous teachers of the past have left no successors is hard to tell. The climate of Italy is certainly as balmy as ever; the olive ripens as of yore; so, too, the grape and the orange come to the same perfection that they did centuries ago; but the great scientists and anatomists, like Italy's statesmen and orators, exist only as memories of the golden past.

---

### "Equal Rights to all Free Institutions."

---

*Mr. Editor and Gentlemen:*

SALLUST commences his history by telling us, "Omnis homines, qui sece student praestare ceteris animalibus, summa ope niti decet, ne vitam silentio transeant veluti pecora, quae natura prona atque ventri oboedientia finxit."

It is not an elegant sentence, but it has lived green and fresh for nineteen centuries, and it particularly impresses me at this time.

I am an *humble* member of the medical profession. I commenced poor and my preparatory training was not what I wished for. And I am now merely on the threshold of medical science. As I have reached my meridian,



and am about to descend the steep on the other side, I am destined to ever linger about its portals, and fail to know many of its mysteries.

I now speak to the learned, to those men of science, or of favored birth, who presume to take the honor and dignity of the medical profession under their protecting care; to those gentlemen who would professionally decapitate half their brethren, and deprive the medical college of the authority to give a passport to enter upon this calling.

We can not think that it is the purpose of those favored ones who tower above so many, to cut off competition, but rather to protect the people whom they love so well. They have spent thousands of dollars to prepare themselves for this noble work, which is so often unappreciated; without fees they have searched into the causes of epidemics and diseases that decimate the human race, and have endeavored to neutralize, or do away with them; they have robbed themselves of many pleasures, and denied themselves enjoyments that make life happy, to render charity to others so soon forgotten; and now, lest the dear people be imposed upon, they would take from them the liberty of harming themselves by employing incompetent physicians!

But why would they establish examining boards, made up of this very material they would cut off? The teachers in our medical colleges are almost universally men of ability and learning; but those examining boards are generally appointed by political influence and favoritism as a reward for artful intrigue. (The medical journals are now pointing their sarcasms at the examining boards of Arkansas, recently established.) Nearly everything in this country is governed and managed by "rings"—some are small rings, and others are large ones. It is probably so everywhere, it was so 2,000 years ago. "Led profecto fortuna in omni re dominatur: ea res cunctas ex lubricine magis quam ex vero celebrat obscuratque."

And if they rob the medical colleges of their dignity, if the respect in which they are held be taken away, where will they stand *themselves*? and who will honor *their* degrees?

Europe is pointed to as an example. But who can afford to spend all their best days and a little fortune besides to get an education, and then locate in a sparsely settled country and attend patients twenty miles distant for small fees, and frequently for nothing? This country is not Europe, and European laws and institutions are not always adapted to

our people. And then European physicians, with all their great attainments, have not been in particular demand in this country. Our own home doctors, the ordinary graduates of our own medical colleges, though they may in some respects be unlettered, are generally better practitioners than their compeers from across the sea. A man may understand the human system and the action of disease and medicines upon it, without being able to read Latin and Greek and work the problems of the Calculus. One of the finest chemists in the world, who holds a position in the proudest university of Europe, can not work a simple equation. Life is too short in which to learn everything, and business is too pressing to spend time and labor to prevent us from forgetting it, if it were once learned. It is only by application to and concentration on a particular subject, that we succeed in mastering it.

I know that there are physicians in certain localities who have clamored for a law setting aside diplomas and establishing medical examining boards for all *new-comers*, to keep out "*adventurers*." Adventurers, who sever the ties of friendship and of home, and wander to a distant land to seek their fortunes amongst strangers on their own merits, have ambition and energy, and probably ability, and such are not wished for as competitors. And should any of you gentlemen find it convenient or necessary to emigrate to those localities, and should fall in the hands of those savants, you will find you have assisted in laying a trap for yourselves, and that they will "*pitch*" you (as students call it) very soon.

Our medical colleges have done good work, and they deserve honor. Like other colleges, they may have sent forth some unfit for a part of their responsible duties; but such will always fall by the wayside, or find their level. They will find a place where they will be useful, or be crowded out; they will be governed by the law "the fittest survives."

We will extend to all of our Alma Mater the hand of friendship; and if any of her sons wish to sit down by our side and engage in honorable competition, the passport which she has given will be honored and respected by us.

WEST LIBERTY, W. VA.

J. H. C.

P. S.—I will remark (though it is a different subject from that of which I have been treating): On June 24, 1886, I

successfully delivered a young married lady by craniotomy. She had had already several light convulsions, and I had failed in delivering with the forceps; on consultation with my medical assistant and the friends, it was determined to sacrifice the child. An unforeseen difficulty developed which rendered it a most difficult and bloody operation, and it made a profound impression on all present. Mrs. E. was there, in about her four and a half months of pregnancy. I have recently delivered her of a full-grown and healthy child; but it has a large scarlet spot extending over one cheek and eye. Is this merely a coincidence?

---

## A Preliminary Report on Electrolysis; With Special Reference to Its Trial in Inflammatory Products in the Female Pelvis.

---

BY JAMES HENDRIE LLOYD, A.M., M.D.,

Instructor in Electro-Therapeutics in the University of Pennsylvania.

---

Read before the Philadelphia County Medical Society, October 27th, 1886.

DURING the past spring the writer began a series of exact clinical observations upon electrolysis in the human body. The object was to determine: (1) the utility of the process at all; (2) the diseases in which it was applicable and useful; (3) the best methods of applying it with precision; (4) the current strength—*i. e.*, the greatest potency with the least pain and damage. The observations were intended to be entirely clinical, because (1) it was considered that the theory of electrolysis was sufficiently established without further experimental proof, and (2) it did not appear, after some reflection, how experiments on other tissues, or the lower animals, would give us any facts which could not be as well observed in the diseased tissues of the human body. The first disappointment met with was the difficulty of obtaining a sufficient number and variety of clinical cases. This was, no doubt, due largely to the summer vacation, when all medical work in this city suffers a great hiatus. This will explain the fact that this paper is preliminary to a report which the writer hopes to make in the future, and to have as complete as possible; and must constitute an apology for trespassing upon your time with much less material than it was his original intention to present. The cases presented

below, if few in number, have at least been thoroughly observed. Dr. I. P. Willets gave much assistance in this work.

It may be well to remind you that electrolysis is the breaking up of a fluid, or substances held in solution, into its constituents, by the passage through it of an electric current. Thus, water is resolved into hydrogen and oxygen, as may be readily observed upon passing a mild current through a tumbler of this fluid. In compound fluids or salts the acids seek the positive while the alkaline bases go to the negative. The subsequent chemical actions of these acids and alkalies are just the same as would be the case if they were introduced from without, and constitute the secondary actions of electrolysis. These changes are in exact quantitative relation to the strength and duration of the current—that is to say, with so much current-strength continued a certain time (or, technically, with so many *coulombs* of electricity), just so much hydrogen, oxygen, or whatever the simple atoms or compound radicle may be, will be liberated. In such a simple fluid as water the figures of this problem are exactly known, but in such a complex organized series of tissues and fluids as exist in the human body (while doubtless the changes are just as constant and according to law), the figures are not known, and may never be. It is, of course, understood that the galvanic current is here referred to, as induction-currents are without practical electrolytic effects. In addition to these true electrolytic effects there are other effects, both physical and physiological, which are important to be understood. First of these in importance is the so-called “electrical osmosis,” formerly called the cataphoric action of electricity. Dr. Amory, in his recent work on Electrolysis, lays great stress upon this action. When an electric current is passed through two fluids separated by a porous septum, the fluid itself will pass in the same direction as the current, *i. e.*, from the positive to the negative. This is demonstrated outside of the human body. Dr. Amory speculates that thus nutrition is affected, the parts being literally robbed of their pabulum by the osmosis, or flow, of nutrient fluids toward the negative pole. But, theory aside, we have an array of clinical facts—fortunately accumulating—that there is a decided resolvent action in the electric current, both upon normal and abnormal tissue. This may, or may not, be strictly according to the known facts of electrolysis or osmosis. It is probably partly because of



them, and partly because of other factors regulating the vascularity and nutrition of the parts, which are but little understood. The chief observers of exact facts have been Cinicelli, who studied aneurisms; Dixon Mann, who studied the quality and quantity of clots formed in blood by an electric current; Duncan, who has cured many cases of nævus by galvano-puncture; and Fox and Hardaway, who have removed supernumerary hairs by the current. In addition, we have Newman and Bruce Clark, who report, especially the latter, such candid and exact details of electrolysis in the cure of stricture, that we are scarcely permitted to doubt; Mundé, who empirically and without sufficient detail, reports success in inflammatory products in the female pelvis; Engelmann, who has removed a uterine fibroid with very strong currents; Kelsey, who has cured hemorrhoids, and Reeve, who uses electricity as a reliable emmenagogue.

*Conditions of Observation.*—The series of cases upon which this paper is based was chosen because of the comparative ease of observation (most of the phenomena being readily accessible), and, also, because of the importance and general prevalence of inflammatory, vascular, neuralgic and functional lesions in these parts. These cases all had a history of cellulitis, followed, probably, by the state of relaxed circulation so well described by Emmet, and characterized still further by neuralgic pains in loins, abdomen, ovaries and limbs, while the menstrual epoch was usually deranged—dysmenorrhœa being especially prevalent, with leucorrhæal discharge in the interim. Touch revealed in all these cases more or less fibro-plastic deposit, causing pain on pressure and more or less fixation of the womb. The *disadvantages* of this series of cases were, chiefly, that the application of electricity had to be made through mucous membrane (which, undoubtedly, must diffuse some of the current to surrounding parts), that some of the most urgent symptoms were subjective (and, therefore, not always reliable guides), and, finally, that the vascular condition would vary from day to day or week to week, and tend to confuse the observation of the permanent effects, if any, upon the adventitious products.

*The Method.*—The patients were put in the dorsal position, and, first, the negative electrode was introduced into the vagina and well against the point of apparent greatest deposit. This negative electrode was at first cylindrical in form, about one and one-half inches long and one-half of

an inch in diameter, nickel plated and fastened upon a flexible insulated stem about eight inches long. The nickel-plated end was covered with absorbent cotton thoroughly soaked in warm water. Later, the cylindrical form was substituted by a smaller olive-shaped electrode, also nickel-plated and covered with absorbent cotton; this was done in order to concentrate the current more effectually. The circuit was completed by applying a large flat sponge positive electrode to the abdomen. The position of this electrode was changed at times, according to circumstances; where there was much ovarian pain, it was put over the ovary; where there was lumbar pain, over the lumbar region, etc. The polarity was never changed. The cells used were the blue-stone cell, known as the Siemens-Holske modification of the Daniel. The number of cells was not usually noted in the reports, as the current strength was taken entirely by a galvanometer, which was kept in circuit as desired. This galvanometer was made by Flemming, and was guaranteed by him to be an accurate clinical instrument. It is vertical, graduated in milliamperes, and patterned, in the main, after the Hirschmann instrument. The lowest strength used in these cases was six milliamperes, the greatest strength was twenty-four milliamperes. These extremes were used only occasionally—the greatest strength, in fact, but once, and then inadvertently and with the effect of cauterizing the mucous membrane. The average strength used was about fourteen milliamperes. The duration of treatment was almost invariably ten minutes; in some exceptional instances the treatment was continued to fifteen minutes. The vaginal electrode was occasionally shifted about or passed, firmly pressed upon the mucous membrane, from one side of the vagina to the other. The *immediate* effects of these applications upon the patients were almost *nil*. No complaints were made of pain, except by one patient in whom there existed almost a vaginismus, and who suffered from the introduction of the instrument rather than from the current. Even in the instance when the mucous membrane was destroyed by a too powerful current, no complaint was made of pain, and, in fact, the accident was not discovered until the following day.

These cases were kindly sent by Dr. Wm. L. Taylor, from the Gynæcological Dispensary of the University Hospital, and the treatment was conducted in the Nervous Dispensary.

Case I.—C. S., 46, married; three children, youngest twenty years. Complains of metrorrhagia. Treatment: February 23, 1884. Slight dilatation of cervix, and endometrium curetted, with removal of granulations. Ergot, etc.

August 20, 1885. Returns, complaining of "cramps in bowels." Some congestion of uterus, with slight tenderness on pressure.

April 20, 1886. Returns after attack of peritonitis (cause unknown); was sick for a couple of weeks. Touch: Cervix undergoing absorption; fundus anteflexed and fixed; tenderness and enlargement posteriorly and to left of body.

April 24. Treatment was begun in the manner related above, and continued with two applications per week. The greatest current strength attained was eighteen milliamperes, from thirty cells (which were not at their best at that time). There were twenty-two applications in all. After five applications the patient reported that she was menstruating, the first catamenial show in eight months. After eight applications the patient reported, and continued to report, her subjective symptoms much improved, *i. e.*, the neuralgic and bearing-down sensations. After the ninth application Dr. Taylor made a careful examination, and found that actual absorption had taken place, and that the uterus was more movable. This absorption was confirmed by another careful examination, made after the twelfth application. The only set-back was caused by the patient doing some heavy domestic labor after the fifteenth application. This was one of the most successful cases treated. Until the last application, however, there was some complaint of pain. Treatment was suspended by patient leaving the city.

Case II.—A. S., 31, married; sterile; puberty at seventeen. Always had inward weakness, with dysmenorrhœa, since puberty. One year ago she had an attack of inflammation. Since then she has had bloody leucorrhœa, severe pain in each ovarian region, and in hypogastrium particularly; sense of great weight and bearing down. Touch: Uterus firmly fixed by inflammatory lymph; fundus anteflexed; mass extremely tender. Treatment began in same manner and frequency as in the preceding case. The external electrode—large sponge anode—was frequently applied over the lumbar region in this patient, because lumbar pains were among her most distressing symptoms. This patient has had, to this date, twenty-one applications, averaging about

fourteen milliamperes, continued ten minutes. After four applications Dr. Taylor reported her condition unchanged. After six applications the patient said she was much relieved of the pain in her back. After eight applications she had a menstrual flow, which was more free and less painful at the commencement, but became as painful as ever toward the close. The usual cramp-like pains were not as bad as before treatment. After ten applications Dr. Taylor made another examination, and reported slight improvement, *i. e.*, the parts were more pliant and less painful. After the twelfth application she had a severe dysenteric attack, with much abdominal pain, which left the left ovary tender and sore. We note evidence of much thickening between cervix and left vaginal wall. The patient, of her own accord, absented herself for about one month at this time. When she came back, she reported that her disagreeable subjective symptoms, pain and bearing down, had returned during the suspension of treatment. After the fifteenth application she had apparently suffered from an acute, circumscribed peritonitis (or cellulitis), which caused some increase of deposit. She still said, however, that she had less pain. At the sixteenth application a much stronger current was passed than formerly. This was due to the fact that our cells had been overhauled and supplied with new zincs, thus increasing their electro-motive force, and to the omission to observe with due care the record of the galvanometer. We had, moreover, no rule by which to limit current strength, so that when we discovered the increase (twenty-four milliamperes), it was purposely continued for some minutes. The patient made no complaint of pain at the time, but presented herself next day with the remark that she thought "something was wrong." Examination then revealed a place, the size of a half dollar, upon which the mucous membrane had been destroyed, leaving a sloughing, ulcerated, depressed wound. Treatment was suspended, and after a week the patient had entirely recovered without any untoward symptoms. This patient continues under treatment. There has not been as much improvement in her condition as in the former case, if we regard the absorption of lymph. There has been decided improvement in her symptoms of pain.

Case III.—L. M., æt. 29, married; one child, seven years. Four years ago had an attack of cellulitis lasting six weeks. Since then has had aching in back and limbs, pain in hypogastrium—worse at menstrual periods; menses regular in



time and last one week; leucorrhœa; vertical pain. Touch: Cervix low down. Fundus anterior and fixed. Deposit of lymph posterior to uterus.

April 24th. Treatment begun as in former cases. This patient had a total of seventeen applications. The current strength on some occasions was allowed to run up to eighteen milliamperes; the average used, however, was about fourteen. The number of cells required for this strength would vary from twenty-five to thirty; but these cells at this time were not in their greatest activity. After four applications Dr. Taylor reported actual condition unchanged. There was ovarian tenderness; on this account the anode was usually applied over the left ovary. The history of this case can be briefly summed up as one of continued improvement. Neuralgic pains, especially, yielded, even more than the deposits, but toward the last it was very evident to touch that the parts were softer and more pliant. The patient finally said that she "had not a pain or an ache," and discontinued treatment of her own accord. My impression is, that this case was not as bad a one from the start as any of the others here reported.

Case IV.—C. B., æt. 28; married; eight years; puberty at 14; always had severe dysmenorrhœa. This has been increasing in severity. Four or five years ago had an attack of pelvic cellulitis. Since then has had sharp pain in region of right ovary, pressure on bladder, and sensation of weight in pelvis. Touch: Cervix of uterus low down in hollow of sacrum; fundus acutely anteflexed. In each ovarian region there is great tenderness, with deposit of lymph; also posterior to uterus (which is firmly fixed) there is a deposit, larger, to the left.

April 24th, 1886. Treatment commenced as in other cases. There have been, to date, twenty-eight applications. This patient has been much more sensitive than the others. She has a condition approaching to vaginismus, the whole vaginal tract appearing to be hypersensitive. In consequence, an average less current strength has been used than in the others; this average would be about thirteen milliamperes. After three applications, had a menstrual flow more painful than usual. Changes in this case were slow and mainly in the direction of less pain and sensitiveness. After thirteen applications she said that she always suffered some pain after each treatment, which pain lasted several hours, but was not severe enough to be a serious matter. There

were, no doubt, some hysterical symptoms in this patient. Her menstrual periods continued very painful for a long time, and she insisted that she always had a febrile reaction with them. After thirteen applications, the evidence of cellulitic deposit still existed. After twenty-four applications, Dr. Taylor examined patient, and said that the deposits were much softened and almost gone. He considered patient much improved. This patient is still under treatment. She still has painful periods, but has much less vaginal and ovarian sensitiveness than formerly. This case was more obstinate and discouraging at first than any of the others, but can be claimed, at last, to have yielded to treatment. The evidence of absorption of deposits in this case seems to me to be beyond dispute.

*Conclusions and Inferences.*—The great objection, in my mind, to the theory of true electrolysis in these cases is the resistance of the mucous membrane and the diffusion of the current; in other words, the weakening and loss of current strength before it actually reaches the neoplasm. This objection does not hold when galvano-puncture is used, as in aneurism and the cure of moles and nævi; also in the removal of hairs, or in subcutaneous treatment of goitre, as the writer has himself practiced it. But in strictures of the male urethra, and in these cases of cellulitic deposit in the female pelvis, I do not see how galvano-puncture could be well practiced, certainly not safely in the great majority of cases. However, in the light of clinical results, we are justified in continuing procedure even if it does not harmonize with some theoretical data. I have always insisted upon the necessity of measuring the current strength, if we design to place our observations on as scientific a basis as possible, and as far removed from the haphazard empiricism which is too characteristic of electro-therapeutics. Without a galvanometer serious damage might have been done in Case II. Without it, moreover, the operator is exposed to a number of other accidents, and, in fact, can never know what he is about. The patients' feelings in these cases were no gauge. I have known the current to be broken by the slipping out of the cord at the binding post, or interrupted by inadvertently turning it through a rheostat. But the most common cause of error is the varying resistance of the human body, and the difference, in this respect, of one patient from another. This is illustrated in the above cases, as follows: On the same day the current from a cer-

tain number of cells gave but 6 milliamperes in C. B.; but gave 14 in A. S. This great difference I was unable to explain, but quite able to overcome. Finally, I have often thought that there might be some analogy between the action of galvanism, under these circumstances, and counter-irritation. Any one who has felt the persistent soreness produced on the skin of the back of the hand by a strong current, with a tendency to desquamation, or even vesication, could readily believe in this resemblance. We have no very good explanation how counter-irritation acts, but still we use it successfully to promote absorption under a great variety of conditions. It seems possible that a strong current (and these currents were as strong as could be well borne) might produce counter-irritation upon the vaginal mucous membrane and promote absorption of inflammatory products within.

The procedure in intra-vaginal galvanism is, no doubt, open to the objection of being tedious, and requiring frequent repetition, which is, in a measure, compensated by its being painless and less disagreeable to the patient than some other methods of treatment; while it seems to offer more relief to some of the symptoms than other plans. Among the special effects noted in these cases was the promotion of menstruation. The current-strength used did not tend to re-excite inflammation except in Case II., in which case, however, the evidence was not entirely conclusive.

---

## A Unique Case of Injury to the Ear.

---

BY LOUIS J. LAUTENBACH, M.D., PH.D.,

Assistant Surgeon to the Eye and Ear Department of the Philadelphia Dispensary.

---

Read before the Philadelphia County Medical Society, October 20th, 1886.

J. H., AGED 36, salesman, came to me February 18th last, on account of a ringing, a feeling of fullness and deafness of the right ear, which he said had come on the previous afternoon. Up to this time, according to his statement, his ears had been of equal hearing power, and he had noticed no defect nor suffered any inconvenience from either ear.

On the afternoon of the 17th instant, while walking along

the railroad, the New York Express, going in an opposite direction, went past him, his right side being toward the train, when he suddenly experienced a sharp pain in the right ear, which was accompanied by deafness, a marked degree of ringing and of fullness being experienced immediately. The pain soon disappeared, but the dullness, ringing and fullness were present when he presented himself to me.

When examined he had no pain, but yet there was slight tenderness occasioned by pressing on the tragus. The watch (of which the average hearing distance is 52 inches) was heard at 11 inches with the right ear and at  $3\frac{1}{2}$  inches with the left; the tuning-fork aërially was heard equally in the two ears, but by bone conduction it was heard very much more loudly in the left ear.

The anterior wall of the meatus was found to be quite red, and at about three-eighths of an inch within the tragus a stiff, hairlike body was seen to be inserted; following the course of this body inward it was found to perforate the membrana tympani immediately below and very slightly posterior to the insertion of the manubrium of the malleus. The awn, or beard of wheat (for this is what subsequently the foreign body was found to be), was wedged between the inner wall of the tympanum and the wall of the meatus, being bent like a bow. The membrane was decidedly concave outward, it was tense, it was very much congested, particularly along the handle. The outer end of the wheat beard was detached from the wall of the meatus, and by the forceps was withdrawn from the tympanum, requiring an appreciable amount of force—much more than I had expected to exert.

As it was withdrawn, a little pus exuded, and this was followed by a drop or two of serous fluid. The hearing of the ear was now reduced to five inches, but the feeling of fullness, the dullness of hearing, and the ringing, entirely ceased. The left ear being examined showed marked evidences of middle ear catarrh. The tuning-fork, by aërial conduction, showed no change, but, by bone conduction, it was heard only slightly (instead of markedly, as before) better in the left ear.

The foreign body was a piece of the awn, or beard, of a wheat grain, and was 24 mm. in length; its thick, flat end had penetrated the membrane, and its teeth, or saw-like points, with which it abounds, were directed forward; this



explains the force required for its removal, as well as the reason why it lodged so readily in the wall of the meatus.

Admitting that there was occasioned by the foreign body an increased hearing distance, it is an interesting question: How was it produced? It may be that the pressure exerted inwardly was sufficient to bring the stapes into a more nearly normal position, thus improving the hearing; the pressure being removed, the hearing diminishing. It is, however, far more probable that the ears were of unequal value before the accident, but that the patient took no note of the difference.

---

## The Relations Between Sanitary Science and the Medical Profession.

---

BY NATHAN ALLEN, M. D.

Read at the Fourteenth Annual Meeting of the American Health Association, Oct. 5, 1886, at Toronto, Canada.

---

### SANITARY SCIENCE.

WHAT is sanitary science? This phrase is comparatively new, but is full of meaning. The word "sanitary," in its derivation and uses, signifies health or healthy, but when combined with science, is far more expressive. It means the application of laws or principles for the preservation of health in whatever way they may be employed. As to the use of the term science here, the claim can not justly be called in question. To such an extent have these principles been discovered and applied, and so uniformly and certainly have the same results followed, that they may be said to constitute a science—the *science of health*.

It is not necessary that these laws should be understood by everybody, and admitted as true, that they be considered a science; but if they have been extensively applied by a large number of good judges, and the same results never fail, they constitute, when combined, to all intents and purpose, a *science*—as much so as physiology or biology. As both these are comparatively modern sciences, so is that of sanitation, certainly in name and application.

It is only about forty years since this subject began to attract general attention. It started with the establishment of

the registration of births, deaths and marriages, in Great Britain, by Dr. William Farr. While investigating upon a large scale the causes of death, the inquiry naturally arose, what can be done to prevent as well as to cure disease? This inquiry, from a small beginning, has resulted in the most surprising advance in a knowledge of the laws of health and life. So rapid and extensive have been these changes, that one living during this period can hardly credit them; and never were these improvements taking place faster than at the present day. But the advantages already secured, though great and invaluable, are mere harbingers of richer and more permanent blessings in store. In the progress of this science, every year has signalized the fact, that it had a deeper and broader scope, not so much in improving the old methods of work, but in entering into new fields and enlisting new agencies. Its aim is not merely to remove the existing causes of diseases, but to destroy the germs or seeds of disease. It does not stop with preventing this or that contagious disease, or reduce to the minimum the zymotic class of diseases; but when the principles of this science are applied to the fullest extent, they will present the human body so sound and healthy in all its parts as in a great measure to forestall disease.

There is, we believe, a normal standard of physiology, where all the organs are so sound and well balanced, and where all perform respectively their functions so thoroughly, as to afford small chances for disease. This organization represents the highest standard of health, and the nearer the human body in all its parts approximates to this standard, the better or higher degree of health shall every such person possess. With this view of physiology, it will be seen that all disease is a violation of law, whether it arises from internal or external cause. As there must be some change in the structure or functions of certain organs in the body, for the introduction of disease, is it not clearly the province of sanitary science to take cognizance of such changes? If the violations of law can be arrested or modified in the very first stages, may it not serve to prevent a vast amount of disease?

There is a sphere higher and broader, where the principles of this science should be brought to bear—that is, in perfecting the human body. It is well known that there is naturally a most surprising difference between one individual, or one family, and another, as to good health and the

liabilities to disease. Why should not sanitary science recognize this difference more, and point out the way whereby great improvements can be made in the physical system, and then eradicate, upon a large scale, the first, the primary causes of disease? By commencing early and with the use of proper means, the organization of every individual can be greatly improved and made more healthy; and by a proper application of the laws of inheritance for three or four generations, human organization may become so perfected as to diminish a large proportion of the sickness and disease that exist at the present day. This is not mere theory nor speculation, but a doctrine based upon the laws of physiology—laws which should be better understood. Inasmuch as such a change would be productive of sanitation in the highest degree, is it not the province of sanitary science to enter and cultivate this field? Would it not improve health and prolong life upon the largest scale and to the greatest number? What other science or agency can do this work so well? That human organization can be improved, by the laws of exercise, nutrition and inheritance, there can be no question. If the highest state of health depends on a normal standard of physiology, in which all parts of the body are perfect in structure, combined with a harmonious development of every organ, it is certainly the province of sanitary science to use all its appliances to obtain that standard. It is no more nor less than the same form or image in which man was created; and the same almighty power has established laws by the use of which man, in the process of time, can attain to that of his original creation. The more thoroughly physiology is studied, with reference to sanitation, the stronger is the evidence that man is the artificer of his own physical well-being. The laws of inheritance must become the agents of sanitary science; and healthy offspring must become an object of primary importance. When the principles of physiology and sanitary science are both brought to bear in renovating human organization, we shall find that a wise provision is made for the redemption of the body as well as the soul. We can not expect this change will be brought about by divine interference, nor is it left for accident or chance, but the means and responsibility are wisely placed in the hands and power of human agency.

In case the body is thus reconstructed—made sound and healthy in every part—the germs or seeds of disease will

not be found in the system. Here is work for sanitary science on the largest possible scale. In making these changes, in order to secure the highest standard of health and to the greatest number, it will be seen that sanitary science has a great work to do. The whole system of education, especially in early life, must be based more and more upon the systematic training and development of the body. There are a multitude of evils in the present state of society that conflict with the laws of health and life, which sanitary science would remove or regulate. Then, in all matters pertaining to mental improvement, to the progress of society, to every phase in civilization and the various developments of Christianity, the sanitation of the body and of the mind must be paramount to everything else. In fact, the province of sanitary science covers the entire life; not only of every individual, but of the whole human race. No other subject or science is of such transcendent importance. It is in its infancy, and no comparison can be made between what it now is and the magnificent proportions it is destined to attain.

Taking this view of physiology, and that health is its normal condition, it will be seen that all deviations from this state, or violations of the laws that govern it, furnish the causes of entrance of weaknesses, imperfections and diseases which afflict the human system. These changes may occur from internal, predisposing causes, or from agents operating externally to the body. Just at this point, in these changes of organization from a normal to an abnormal state, we are taught most important lessons. On one side, we have sanitation and sanitary science; on the other, disease and its superstructure, medicine. Just here start the most powerful and destructive evils that ever befell the human family. These evils may be trifling in their origin, but increase—sometimes slowly, sometimes rapidly—and become terrible in their results. They include the whole catalogue of diseases; their name is legion. We dwell on this point, for it is very important to have clear and definite ideas of disease, its nature and cause. It is simply the penalty of violated law. There is no mystery in it; no visitation of Divine Providence; no curse inflicted by some evil spirit. It is no less important for sanitarians than for physicians to have a clear and definite knowledge of disease as well as its cause.



HISTORY OF SANITARY SCIENCE AS CONNECTED WITH THE  
MEDICAL PROFESSION.

Formerly the great object of the medical profession was the *cure* of disease. The program of studies and lectures in the medical schools was confined almost exclusively to this one idea. The term "hygiene" was scarcely to be found in books, or referred to in lectures. Physiology was comparatively a new science, and some of its most important applications have not been discovered till within a few years. In fact, this science can not be fully understood in all its bearings without combining with it the principles of hygiene.

The study of physiology was formerly superficial, rather than profound; as the laws of health and life are based on this science, these of course were not very well understood. Hence there was great difficulty in ascertaining the real causes of disease and the natural laws that governed it. *Health and its normal conditions* must be first understood, and disease—its causes and treatment—come afterward. Very little thought or attention was given to the object paramount to all others: health and its requirements. The whole burden of medical studies and lectures was pursued with special reference to disease and its treatment. Thus, in the preparation for the practice of medicine, the treatment of disease has so completely absorbed attention that normal physiology and the recuperating powers of nature have, in a measure, been overlooked. "*Vis medicatrix*" was a favorite phrase of some writers, but very little use has been made of its practical application. Two great evils have grown out of this defective mode of education: 1st, a lack of clear and definite ideas of diseases and their causes; and 2d, a tendency, in the treatment of disease, to resort mainly to artificial means. But within thirty or forty years there has been decided improvement in respect to both these evils.

From 1840-50 several leading physicians in Great Britain, from careful observation and reflection, began to make some changes in their practice: 1st, to dispense less medicine; 2d, to study more carefully into the natural laws of disease; and 3d, to summon to their aid the powerful resources of nature. Among these physicians were John Forbes, John Connolly, Andrew Combe and others. The *British and Foreign Medical Review* was their organ of pub-

lication, which attracted much attention. Several works explaining the views of these men were published at that time, and had a large circulation.

From 1840-50 the Registrar-General's office for collecting and publishing reports of the births, marriages and deaths in Great Britain became fairly established. This agency has been more influential than any other for creating an interest in sanitary matters. In examining into the causes of death, in different localities, and comparing the mortality of one place with another, started many inquiries on public health. The annual reports, also from this office, prepared by Dr. William Farr, added greatly to the interest on this subject. About the same period Dr. Andrew Combe, of Edinburgh, published several works on the application of physiology to education and health. These works had a very large circulation and exerted great influence in directing public attention to the laws of health and life. The writings of Dr. A. Combe were peculiarly calculated to show the advantages of a practical knowledge of physiology for developing healthy bodies and thereby preventing disease. While the writings of Dr. Combe were based strictly on scientific principles, they were remarkably well adapted, both in style and matter, to instruct the masses.

One of the most distinguished physicians at this time in Great Britain, advocating reform in medical practice, was Dr. John Forbes. In his celebrated paper called "Young Physic," which was published in the *British and Foreign Medical Review*, he made this significant statement: "Redoubled attention should be directed to hygiene, public and private, with a view of preventing diseases on a large scale, and individually in our sphere of practice. Here the surest and most glorious triumphs of medical practice are to be achieved." If this prophecy has not already been fulfilled, it is very evident that, in progress of time, it will be still more abundantly.

As a result of the interest on this subject, a royal commission was appointed in 1857, to inquire into the sanitary condition of the army in England. This commission recommended that not only some regulations should be adopted for protecting the health of the army, but that a school be established for educating army-surgeons, in which "hygiene and sanitary science" should be taught. This was the nucleus or starting-point of that celebrated work on practical hygiene, by Dr. Edmund A. Parks. This "Man-

ual of Practical Hygiene," constituting a treasury of knowledge on sanitation, has had a large circulation, and passed through several editions.

The interest in sanitary matters has been steadily increasing in Great Britain among all classes. Its fruits are becoming every year more and more manifest by improved health generally, and by a reduction of mortality, especially in cities. Numerous acts of Parliament have been passed in favor of sanitary science. The medical profession and journals generally commend it; and never were its prospects brighter in Great Britain than at the present time.

Perhaps the science has not created so general interest, nor taken so strong a hold, in the United States as it has in Great Britain; but still its history is one of marked interest. Let us notice a few of its salient points. From 1830 to 1840 Dr. John Bell conducted the *Journal of Health*, in Philadelphia, which very ably advocated the principles of hygiene. In 1835 Dr. Jacob Bigelow, in the annual address before the Massachusetts Medical Society, pronounced a certain class of diseases "self-limited" in their character, and urged that they should be treated accordingly. This was a marked step in the way of medical reform, which, with other influences, led to what was called the "expectant treatment of disease."

In 1842 was issued the first registration-report of births, marriages and deaths in Massachusetts, and has been continued annually, till we have now the forty-fourth report. Sanitary science has been greatly advanced by facts and arguments derived from these reports. Several other states have followed the course of Massachusetts, in establishing registration-departments. No one agency can do so much to advance the cause of vital statistics as such registration-reports. The application and progress of sanitary science depends much upon a knowledge of vital statistics; and the more thoroughly these are understood, the better for the cause of sanitation.

In 1844 Dr. Elisha Bartlett published, in Philadelphia, a work on the "Philosophy of Medical Science," and, in urging upon the profession a better knowledge of the cause and nature of disease, said: "The next thing to be done is to find out the best methods of modifying and *preventing* disease. This is the great mission which now lies immediately before us: *this is to constitute the great work of the next and succeeding generations.*" This statement was made two

years before that of Dr. Forbes, already quoted. Both these men, living in advance of the times, were distinguished for original thought and independence of expression; they have proved themselves true prophets.

In 1860 one of the most brilliant addresses ever given in this country was delivered before the Massachusetts Medical Society by Dr. Oliver Wendell Holmes. As this had a direct tendency to promote sanitary science, the address and its reception deserve special notice. At this time the importance of a more thorough study of *Nature* in medical practice had been urged on the profession in previous addresses and other medical papers published. In pursuing this line of thought, Dr. Holmes expressed very positive opinions, accompanied with reasons and illustrations, that too much medicine altogether was given by the profession, and that there were great evils arising from over-medication. For this opinion, Dr. Holmes was not only severely criticised by prominent physicians, but denounced and abused, if harsh language could do it. But reaction soon followed this violent attack. The discussion led many physicians to a new and more careful study of the natural laws of disease and the true effects of drugs. Great good came out of this controversy. Dr. Holmes, instead of being injured, gathered new laurels. Many young physicians, seeing the propriety and force of his strictures, struck out a new course in their practice.

The most efficient agents of all, for establishing and applying the principles of sanitary science, are boards of health. The first state board of health in this country was formed in Massachusetts in 1869, since which time boards have been started in nearly all the states of the Union. In 1872 the American Health Association was organized in New York. This is the most extensive and powerful agency of the kind in this country, and we think we may safely say in the world. It has published eleven large volumes, which contain a greater and more valuable collection of papers on sanitation than can anywhere else be found. The primary object of the association, as stated in its constitution, is the "advancement of sanitary science." A careful examination of the contents of these volumes affords the strongest possible evidence that the association has done a grand work. Here almost every question connected with the science, in all its diversified applications, is found discussed. Some of the papers show great research and an originality of thought



which might be elaborated into a volume. Besides its published works, the association has greatly advanced the interests of sanitary science in all the cities where it has held its annual meetings.

#### RELATIONS OF SANITARY SCIENCE TO THE PROFESSION.

While the success of this science depends mainly upon physicians, there is a wide difference in the interest which they take in it, as well as the sacrifices which they are willing to make for it. Let us inquire who, and how many, of our physicians have been actively engaged in this reformatory work? The number, compared with the whole profession, is not large—in fact, is very small. Those engaged in this work are widely scattered, both in city and country, and are generally active with the pen and tongue, so that they seem more numerous than they really are. There are, it is true, great numbers in the medical profession who are kindly disposed to sanitary reform, and speak highly of it in their practice, but, at the same time, are unwilling to make much sacrifice to advance its interests.

(TO BE CONTINUED.)

---

### A Case of Gangrene of the Lung.

---

BY J. H. MUSSER, M.D.

---

Read before the Philadelphia County Medical Society, October 20th, 1886.

THE patient, at the time of admission to the hospital, stated he had been ill for two weeks with cough and extreme pain in the right side of the chest. Independent of the cough and pain there were no other symptoms. The patient walked to the hospital, and was in fairly good condition. The highest temperature reached while under observation was  $102^{\circ}$ , falling to normal nearly every morning; perfectly intermitting, without sweats. Physical examination showed at the base of the right lung a cavity apparently near to the surface of the chest. There was, in addition, a very offensive odor of the breath. This was gangrenous in character and accompanied with expectoration of fetid matter. The matters expectorated were frequently streaked with blood. Large quantities of matter were brought up, especially when the position was changed. In the mornings there were violent fits of coughing, with profuse expectora-

tion. The patient slept well, and was not disturbed at night by the cough. As I have said, the patient did not appear to be very sick on admission, and he continued in about the same condition during his stay in the hospital. He did not obey the injunction to stay in bed, but was about the ward the most of the time. The cause of death was hemorrhage. The patient was sitting by the side of the bed, when he was suddenly seized with severe hemorrhage from the lungs, and died within ten minutes. The amount of blood lost was so great that it seemed as though an aneurism must have ruptured.

At the autopsy, the right lung was found intimately adherent throughout the thorax, and in the lower lobe of this lung there was a cavity fully the size of two fists, presenting gangrenous walls and filled with clotted blood. On careful examination, the hemorrhage was found to have come from a small vessel in one of the columns which arose from the walls of the cavity. The posterior wall of the cavity consisted solely of the pleura. There was in this position no lung tissue. Between the cavity and the diaphragm there was a thin layer of consolidated lung tissue. Between the lobes of the lung there was considerable pleurisy, and around the cavity consolidation of lung tissue. The left lung presented no spots of consolidation. The bronchial tubes were filled with blood, and, on section, the lung showed an exquisite red, white and black marbled appearance. There was no disease of the heart and blood-vessels. There were no foci in other parts of the body from which gangrenous emboli could have arisen. The internal ears, however, could not be examined.

From the acute history, the short duration of the case and the evidences of pneumonia around the cavity, I have concluded that this was a case of intense pneumonia, resulting in breaking of the lung structure. The only thing which I have regretted in the case is, that I did not resort to tapping or opening the cavity and instituting thorough drainage. This would, I think, have been justifiable. The extreme thinness of the wall of the cavity, and its close adherence to the chest wall, rendered this perfectly feasible. If thorough drainage had been resorted to early, the result might have been different. The walls of the cavity were extremely ragged and irregular. The urine was not examined for sugar. It contained no albumen. There was no asthenia or adynamia which might have led to gan

grene of the lung. It seems to me to be possible, and has been practiced, that in many of these cases operative measures could be resorted to. In cases of an embolic or thrombotic character, with several cavities, operation could not be resorted to, but in a case like that reported I think that operation would be justifiable.

---

## Selections.

---

### The Fate of Extravasated Blood: An Experimental Research.

---

THE object of the research was primarily to determine the share taken by the liver, the spleen and the bone marrow in the disposal of extravasated blood. The method of research was the transfusion of large quantities of blood into the peritoneal cavity, the blood being, in all cases, derived from an animal of the same species. The animals used were the rabbit and dog.

I. *Local Fate.* 1. The part taken by cells in the local changes going on around extravasated blood is of the greatest importance; the cells being of two kinds—those of leucocyte, and those of connective-tissue origin. 2. The formation of blood-pigment from the red blood-corpuscles is mainly a “cellular” process, being effected through the agency of cells, either by inclosure of the corpuscles bodily within them, or by disintegration of the red corpuscles and then inclosure of their fragments. 3. In the process of so-called “organization” of blood-clot, both varieties of cells play an important part; but, while both leucocytes and connective-tissue cells are concerned in the disintegration of the red corpuscles, the former in addition effecting the removal of the *debris* from the seat of extravasation, the connective-tissue cells alone are concerned in the process of formation of fibrous tissue by which ultimately the clot becomes replaced.

II. *Absorption.* 4. The absorption of extravasated blood applies not only to the serum of the blood, but also to the great majority of the red corpuscles which remain unentangled amidst coagula or the surrounding tissues. 5. This absorption is extremely rapid, both from the subcutaneous

tissues, but especially from the larger serous cavities. 6. In the case of the peritoneal cavity, the absorption of the serum and red blood-corpuscles is effected almost entirely through the lymphatics of the diaphragm. 7. Under such circumstances, the increase in the number of corpuscles within the circulation is observable one hour after injection, and steadily rises till it reaches a maximum about the second or third day, the time varying according to the quantity injected. 8. Extravasation *per se* does not affect the vitality of the red blood-corpuscles; if absorbed back into the circulation within a day or two, they continue to live as before. 9. Their longest duration of life under such circumstances (in the rabbit) varies from two to four weeks, this duration applying naturally to only a few of them. 10. The probable life duration of the red blood-corpuscle in man is about three weeks.

III. *Ultimate Fate of the Absorbed Corpuscles.* 11. The three great seats of blood destruction within the body, under pathological as under physiological conditions, are: the liver, the spleen and the bone marrow. 12. The nature of the process of destruction in the liver differs essentially from that in the spleen and bone marrow. 13. In the latter the process of blood destruction is mainly a cellular one, comparable in all respects with, although much more rapid and complete than, the similar processes taking place locally at the seat of extravasation; in the former, the destruction is much more rapid than in the spleen and bone marrow. 14. After increased destruction of blood-corpuscles within the body, the local evidences obtainable are—in the case of the liver, increased richness of its substance in iron and the presence of granules containing free iron within the liver cells; in the case of the spleen and bone marrow, increase in the amount of pigment containing free iron found within these organs. 15. In health a definite relation is maintained between the amount of blood destruction which takes place in the liver on the one hand and in the spleen and bone marrow on the other. 16. Any disturbance of this relation on the part of the liver is of much greater consequence than on the part of the spleen or bone marrow. 17. The former is, in all probability, the pathological change which lies at the root of progressive pernicious anemia; as the latter is the probable cause of the anemia of leucocythemia. 18. The rapidity with which blood-corpuscles introduced into the circulation become destroyed is very great, a number



equivalent to about four or five per cent. of the animal's own blood being destroyed daily. 19. The small quantity of blood transfusable into the organism in the case of man is therefore entirely removed from the body in a few days at most, probably not longer than three or four. 20. Transfusion of blood in the human subject, in cases of pernicious anemia, with the object of increasing the number of corpuscles, is devoid of all physiological basis, and is simply adding fuel to the flame, since the fault in this disease is not one of defective formation of blood-corpuscles, but one of excessive destruction of those already present.—*William Hunter, M.D., Edin. (Brit. Med. Jour.).*

---

## The Dietetics of Pulmonary Phthisis.

BY ALFRED L. LOOMIS, M.D., ETC.

---

THE dietetics of pulmonary phthisis is often the most difficult as well as the most important element in its successful management.

In the limited space at my disposal I can give only general rules and an outline of the practice which experience has led me to adopt.

Three things require consideration:

1. *The most suitable articles of food.*
2. *The time and quantity of its administration.*
3. *The use of artificial digestives.*

Since the object sought is the maintenance of the highest possible nutrition, and as this must often be done with feeble digestive and assimilative powers, the selection of food will not be determined solely by their relative value (chemically) as food products, but quite as much by the facility with which they are assimilated.

The best foods are those from which the system gains the most heat and force producing elements with the least proportionate expenditure of digestive and assimilative force.

Milk is undoubtedly the best food of all *per se*, but in many cases with weak digestive power more nutrition is gained from its weaker ally, Kumyss.

Of the albuminoids, meats, especially beef and eggs, is the most valuable.

The best hydrocarbons are cod liver oil, butter, cream

and the animal fats. Sugars and starches should be avoided as far as possible, since they tend to fermentation, and cause both gastric and intestinal dyspepsia. Only occasionally will a patient be found who is benefited by their use. They should be employed, therefore, only for variety in diet and to avoid that disgust for all food so apt to be engendered by a monotonous diet.

Phosphorous, so important especially in tubercular cases, is secured in preparations of the phosphates, which should not be in the form of syrups. Vegetables and fruits may be required in the earlier stages to avoid monotony, and later to satisfy a capricious appetite, but they should be restricted to the minimum and to such as contain the least saccharine elements.

Two very distinct classes of phthysical patients must be recognized, those under thirty, and those over forty. It may be stated as a general rule that for the first class the basis of all dietetic treatment must be the hydrocarbons and phosphates. They are often *the curative* agents in young subjects.

On the other hand, the albuminoids must constitute the principal food of the second class. It is worthy of note that often in phthisis the demands of waste and repair not only enable young people, who usually object to all forms of fat, to take and assimilate, but even cause them to exhibit a decided fondness for all forms of fatty food. Older subjects, who in health use little albuminous food and more fat, are able to digest large amounts of meat, while fats cause intestinal dyspepsia.

In selecting special articles of diet for these two classes it is important to remember that there are distinct stages which consumptive patients pass through as regards their digestive powers. The first covers the period during which digestion and appetite are unaffected. The second begins with the first indications of septic infection; is marked with intermittent pyrexia and gastric irritability. It extends to the time at which the stomach refuses solid food. The third covers the remainder of the patient's life. It is in the first stage that the best results are obtained.

*Systematic dieting* should be begun, therefore, upon the first suspicion of a developing phthisis. The diet can no longer be indiscriminate, but the rules given below should be strictly adhered to. For young patients meat must be, and butter and cream are to be used freely. Milk should

constitute the principal drink, in quantities of from two to four quarts per day. Other articles are to be taken sparingly, simply to avoid monotony. Each meal is to be supplemented by generous allowance of cod liver oil (3 ss 3 ii). The phosphates, so valuable to this class of patients, can be supplied in sufficient quantity only by special preparations. For patients over forty, meats should be lean rather than fat, and be taken in large amounts. Two to three pounds of beef, three to four quarts of milk and three or four eggs may be given to such patients in twenty-four hours.

In the second stages, changes are required in the method of preparing the food rather than of the articles employed. All the food must be given in fine division and prepared in the most palatable manner. Beef may be scraped or chopped with a dull knife, only the fine which adheres to the blade being used, and eaten raw or lightly or quickly cooked, the essential points being the removal of all coarse fiber and rendering it palatable to the patient. Milk may be taken raw, boiled, cooked in custard, curdled or shaken with cracked ice and a little salt. Eggs are best taken raw or soft boiled. Kumyss may in part take the place of milk, and the various peptonoids of beef, milk, etc., will relieve the enfeebled digestive organs, as well as afford valuable nutrition. Cod liver oil will require emulsification, and fresh emulsions are to be preferred to the stock preparations. Practically, I have found an emulsion of oil, pepsin and quinine available when others caused indigestion and offensive eructations.

In the third stage when only prolongation of life can be expected, the forced diet of the earlier stages must be abandoned. When a hearty meal causes cough and vomiting, with consequent exhaustion, better results will be obtained with smaller quantities of food. In such cases the food must be reduced in quantity, given more frequently and should consist largely of artificially digested preparations.

It is quite customary to delay the use of the digestive ferments until the later stages of the disease; but since it is in the first stage almost solely that we effect a cure, it seems the wiser course to concentrate all our forces upon the disease at this time.

When we wish to crowd the nutrition, twenty to thirty grains of pepsin with fifteen to twenty minims of acid hcl. directly after eating, and ten to fifteen grains of pancreatine one hour after taking food, will enable a patient to digest an

amount of food which otherwise would produce an acute dyspepsia. When the digestion of starches is at fault or requires assistance, the diastase alone may be given with or after the meal. In the second and third stages artificial digestion becomes a necessity.

Some of the most important rules which govern the dietetics of phthisis may be formulated as follows:

1. Every phthisical patient should take food not less than six times in the twenty-four hours. The three full meals may be at intervals of six hours with light lunches between.

2. No more food should be taken at any one time than can be digested easily and fully in the time allowed.

3. Food should never be taken when the patient is suffering from bodily fatigue, mental worry or nervous excitement. For this reason midday naps should be taken before, not after, eating. Twenty to thirty minutes' rest in the recumbent posture, even if sleep is not obtained, will often prove of more value as an adjuvant to digestion than pharmaceutical preparations.

4. So far as possible each meal should consist of such articles as require about the same time for digestion, or, better still, of a single article.

5. Within reasonable limits the articles of any one meal should be such as are digested in either the stomach or intestine alone, *i. e.*, the fats, starches and sugars should not be mixed with the albuminoids, and the meals should alternate in this respect.

6. In the earlier stages the amount of fluid taken with the meals should be small, and later, the use of some solid food is to be continued as long as possible.

7. When the pressure of food in the stomach excites cough, or when paroxysms of coughing have induced vomiting, the ingestion of food must be delayed until the cough ceases, or an appropriate sedative may be employed. In those extreme cases where every attempt at eating excites nausea, vomiting and spasmodic cough, excellent results are attained by artificial feeding through the soft rubber stomach tube.

8. So long as the strength will permit, assimilation and excretion must be stimulated by systematic exercise, and when this is no longer possible, the nutritive processes may be materially assisted by passive exercise at regular intervals.



## Surgical Neurotherapy Based on Cerebral Localization.

---

SINCE the discovery of cerebral electrization by Fritsch and Hitzig, and its subsequent wonderful utilization by Ferriér in the brilliant discovery of the psycho-motor areas, and the amplication of this discovery by Lucas-Championnière, cerebral neuro-surgery has made some remarkable advances. The most notable, brilliant and valuable have been the late correct diagnosis and successful remedial trephinations for cerebral tumor by Mr. Victor Horsley, of London. His last case operated on, on the 23d of last September, has been fully as satisfactory in results as any of the preceding cases. We therefore heartily join the *Medical and Surgical Reporter*, of Philadelphia, in giving the following details of Mr. Horsley's late diagnostic and neurotherapeutic triumph.

Through his brilliant successes cerebral neurotherapy bids fair to receive new impulses, and the surgery of the cranial vault and encephalon a crowning glory which the scientific world shall applaud for all time.

"The patient was a man who had been absolutely hemiplegic for a month, and had passed into semi-comatose condition; before these symptoms developed, he had endured terrible pain in the head, and had suffered from fits. On Thursday, September 23, Mr. Victor Horsley, of London, trephined over the motor region of the right hemisphere, and, after enlarging the aperture made by the trephine, succeeded in removing a large tumor from the brain; the tumor weighed four and a half ounces, was three inches long, two and a half inches broad, and two inches deep. On the day after the operation the patient was perfectly rational, and even amusing in his conversation, and said that he was quite free from pain. On September 27, the wound was entirely healed, and the man had recovered some power in his leg. This is the fourth case in which Mr. Horsley has operated successfully on the motor area of the cortex of the brain. His results constitute a real triumph for scientific surgery. Not only have the facts upon which the diagnosis of the seat of the lesion in these cases rests, been discovered by experiments on lower animals, but the details of treatment have also been worked out in the course of these experiments. The complete success of the surgical method followed is demonstrated by the fact that, in two of

the cases, the wound healed in four days; that, in a third, it had healed in a week; and that, in the case which was in this respect the least successful, the whole of the wound, with the exception of one-sixth, healed by first intention."

—*Weekly Medical Review.*

---

## Oxaluria.

---

BY A. R. NICHOLSON, M.D., MADISON, N. Y.

---

Read before the New York State Medical Association.

WITHOUT attempting in this paper any originality of thought, it is my purpose merely to bring to your notice a group of patients that to me, in a brief practice, has been quite a large one, and after an understanding of the case and a correct diagnosis, with appropriate remedies, I have found very amenable to treatment.

The sex of those that have come under my observation has been principally the male, although I am not prepared to state that man, as a rule, is more liable to be affected than woman.

These patients are not ordinarily termed sick—that is, are not confined to their room or house—and are able to be about; yet they are incapacitated from attending well to their vocations. They are not even in possession of good enough health to enjoy life, but, on the contrary, complain of a disturbance of the nervous system; feeling irritable, dejected and melancholy, with a loss of ambition, and disinclination to attend to any slight duty which may devolve upon them. They are unreasonable in their desires and demands, finding, as they say, "there does not anything go right."

Their business, if they have any, becomes dull and irksome; there is a desire to absent themselves from it, and to avoid society, preferring to remain alone and brood over their bad feelings.

In two cases the patients confessed that they had felt a desire to rid themselves of their bad feelings by committing suicide, but lacked energy or courage to do so.

The physical sufferings are usually those of severe headache. The patient imagines that his brain is diseased, or at another time he may have a feeling that his heart is affected, and wish that organ examined. But more frequently

attention is called to pain through the loins and abdomen, with an occasional pain in the thighs. I have also noticed a frequent desire to micturate, and a sense of heat accompanying the passage of the urine. The stomach is usually deranged, and there is a consequent loss of appetite, with an accumulation of gases, which disturbs the patient by frequent eructations, and a degree of emaciation results.

In alluding to this class of cases I refer to the condition known as oxaluria. Upon an examination of the urine of such a person, a few or many octahedral crystals of the oxalate of lime will generally be detected, which can be found readily with the aid of a microscope with a magnifying capacity of four hundred diameters and of good defining power. The urine usually is devoid of any other abnormality except an excess of earthly phosphates.

Such cases, although not presenting a very sick appearance, demand the serious attention of the physician. In order to benefit the patient, there needs to be found out the cause leading to this condition, which is frequently indigestion: the food is but partially fitted for absorption, and the processes of oxidation are retarded. In these cases the cause of the indigestion must be sought and treated. It may be that the patient's food is not of the right kind; it may contain so much starchy material that all of it can not be completely oxidized, or the person may be breathing impure air, and the blood may not contain sufficient oxygen to oxidize a proper amount of food. The conditions under which the patient lives must be investigated. Too close application to business, with insufficient outdoor exercise, or too small a quantity of water that is free from lime, may aid in causing it.

For the purpose of assisting in the oxidation of the food and stimulating the action of the liver on the food, nitro-muriatic acid, in five-drop doses well diluted and taken through a glass tube, after meals, serves the best of any medicinal remedy that I have used. This forms a pleasant drink, that most patients take with a relish.

A very important part of the treatment consists in relieving the patients of anxiety attending their condition by directing the attention to other objects, outdoor sports or active employment in the open air, and by freeing their minds of business cares for a period, until the oxalates can no longer be detected in the urine.

By following this mode of treatment I have been enabled

to relieve my cases completely of their physical sufferings, and those due to imagination readily vanish. — *Medical Times*.

---

## Gleanings.

---

INGLUVIN.—It has been a favorite saying among the more distinguished of our profession, that there are a few essential drugs without which the practice of medicine would be impossible, and that when we have selected these few, the great multitude of articles in our materia medica are comparatively useless. This is a very true idea. With calomel, opium, castor oil, quinine, mercury and a few such standard drugs, the physician is usually equipped to meet all emergencies. Almost weekly some new drug is brought to our notice, but in many instances, after trial, it is found either inferior to, or no better than, those which we already have, and its use is dispensed with. But it does sometimes happen that we are offered an article of such undoubted merit that it is warranted in taking rank with the *standard* articles of our materia medica. Such an article is ingluvin. (Ingluvin is a refined substance prepared from the ventriculus callossus gallinaceus, the gizzard of the domestic fowl, *gans domesticus*.) It is the essential principle of the gizzard, and bears the same relation to poultry that pepsin does to the higher animals.

A favorite prescription of Chinese physicians for chronic indigestion is to cut up and digest chicken gizzards in hot water until they are reduced to a pulp, and then add some spices. A tablespoonful or two of the resulting paste is taken at each meal until the patient has entirely recovered. From China the practice passed to other parts of Asia, and was adopted here and there among the Mediterranean people. Strange to say, it was never learned by the great nations of Europe until the latter part of the present century.

The diseases in which the use of ingluvin is indicated are indigestion in its various forms, known as dyspepsia, and for sick stomach or nausea caused by debility of that organ. It was originally discovered to be a remedy, indeed a specific, for vomiting in pregnancy; in this respect it stands above all other medicinal agents. In all that is here set forth the



manufacturers claim no more than is sustained by medical authority of the highest standard.

In Ingluvin, the physician has what might be called a specific for a sickness which in many cases has hitherto been uncontrollable.

Ingluvin is a powder of a yellowish-gray color, and may be prescribed in the same manner, dose and combinations as pepsin, three to ten grains. The pulverulent form is considered more desirable, and it can be administered either dry or in water, milk, or tea. In sickness in gestation, the dose may be increased to ten or twenty grains.

The following will make a nice formula in which to prescribe it for the vomiting of pregnancy. It was thus used successfully by Dr. George F. Meeser, of this city:

R̄. Ingluvin, . . . . . 5j.  
Bismuth snit., . . . . . 5ss.

M. Div. in chart xii.

Sig.—One every three hours.

Oxalate of cerium may be prescribed with it, one to three grains to each dose.

Dr. Shelly recommends the following formulæ for diarrhœa, cholera infantum and marasmus:

#### INFANT FORMULA.

R̄. Ingluvin, . . . . . gr. xij.  
Sacch. lac., . . . . . gr. x.

Misce et ft. cht. No. x.

Sig.—one every 4 hours.

R̄. Aquæ calcis, . . . . . f5 ij.  
Spts. lavand. comp., . . . . .  
Syr. rhei arom., . . . . . āā f5 j.  
Tr. opii, . . . . . gtt. x.

Misce. Sig.—A teaspoonful every two to four hours.

#### FOR ADULTS.

R̄. Ingluvin, . . . . . 5j.  
Morphiæ sulph., . . . . . gr. jss.

Misce et ft. cht. No. xii.

Sig.—One every four to six hours.

R̄. Aquæ calcis, . . . . . f5 ijss.  
Spts. lavand. comp., . . . . . f5 ss.  
Syr. rhei arom., . . . . . f5 vj.  
Tr. opii, . . . . . f5 ss.

Misce. Sig.—Dessertspoonful every two to four hours, or after each evacuation.

The substance ingluvin without any combination has also yielded almost constantly satisfactory results.

Dr. Roberts Bartholow, who probably stands to-day as the greatest authority on materia medica in this country, speaking of ingluvin, says:

“Ingluvin has the remarkable property of arresting certain kinds of vomiting—notably the *vomiting of pregnancy*. It is a stomachic tonic, and relieves *indigestion, flatulence and dyspepsia*.

“The author’s experience is confirmatory of the statements which have been put forth regarding the exceptional power of this agent to arrest the vomiting of pregnancy. It can be administered in inflammatory conditions of the mucous membrane, as it has no irritant effect. Under ordinary circumstances, and when the object of its administration is to promote the digestive function, it should be administered after meals. When the object is to arrest the vomiting of pregnancy, it should be given before meals.”

STOMACH OPERATIONS PERFORMED AT PROF. BILLROTH’S KLINIK FROM 1880 TO 1885.—Briefly, the cases and operations are as follows: Gastrotomy, one case. This was done on a patient, æt. nineteen, for the extraction of some teeth. The patient recovered in five weeks. Gastrorrhaphy, two cases; both died. In one the operation was performed for rupture of the stomach after a plentiful meal. Death occurred from collapse in four hours. In the other, from a gunshot wound in a woman aged sixty-three. Death from peritonitis and collapse in twenty-eight hours. Gastrostomy, four cases. In one, for œsophageal stricture, the result of swallowing a caustic alkali. Death occurred on the ninth day from inanition. In a second, for carcinomatous stricture at the cardiac orifice. Death, one month and a half after the operation, from croupous pneumonia. In a third, for the same reason as the second. Death, twenty-four hours after from inanition. In a fourth, also for carcinomatous disease of cardiac orifice. Death, eighteen days after from inanition. Gastrectomy, eighteen cases, of which eight recovered, and ten died. These cases consisted of fourteen pyrolectomies for carcinoma of the pylorus, six of which recovered. One pylorotomy, combined with gastro-

enterostomy, also for carcinoma of the pylorus, death in four months from return of the disease; three pylorectomies for cicatricial stenosis, one recovered; and one, partial resection of the pylorus (removal of a wedge-shaped piece), with death.—*Glasgow Medical Journal*, August, 1886.

NOTE ON COCAINE.—Dr. George Elder thus writes in the *Lancet*, Oct. 30: Cocaine is now so extensively used in minor surgery, and usually with such happy results, that an experience like one I had the other day will come upon most of us as a disagreeable surprise. Preliminary to opening a superficial abscess, twelve minims of a freshly prepared 10 per cent. solution were injected under the skin; and three or four minutes afterward syncope supervened, followed by twitchings of the face, falling of the jaw, coldness of the body, clammy perspiration, lividity of the face—in fact, all the appearances of imminent death. The patient was several minutes in recovering consciousness, and during the remainder of the day felt very prostrate. Several similar occurrences have been noted in ocular surgery from time to time, showing that cocaine is not so innocuous as has been generally supposed.

A BULLOUS ERUPTION CAUSED BY SALICYLIC ACID.—Dr. Rosenberg reports in the *Deutsche Medicinische Wochenschrift* a case of rheumatism treated successfully, as regards the articular pains, with salicylic acid. But the patient complained of a severe burning of the skin, and the body became covered with purplish spots. The medicine was discontinued for a time, but on another trial, a month later, the same sensation was complained of, and in addition to the discoloration of the skin there appeared a number of large blebs filled with serum, situated on the back and extremities, and also upon the conjunctiva and mucous membrane of the tongue and lower lip. A third trial resulted in a precisely similar eruption. Examination of the fluid in the blebs failed to reveal the presence of salicylic acid.

ETHER SPRAY IN THE REDUCTION OF HERNIA.—Dr. George R. Fellows, of Moose River, Me., writes: "About two years ago I was called to see a case of strangulated hernia of two days' duration. Two physicians had been called, but were unable to reduce the hernia by ordinary means. The patient was suffering terribly, but was unable or unwilling to take opiates of any kind. Thinking to relieve the

pain, I sprayed the hernia with ether, using a common hand-atomizer, and was greatly surprised to find the hernia disappearing spontaneously. Since that time I have used ether spray in strangulated hernia in several cases, always with the best results, the operation being painless, and reduction occurring spontaneously or with slight pressure.

USE OF LANOLINE IN MIDWIFERY PRACTICE.—Dr. C. Clark Burman calls our attention through the *Lancet* to lanoline as a particularly efficient means of reducing the rigidity of the perineum in primiparæ. Owing to its penetrative and softening properties, he finds it much preferable to the plan adopted of friction with pure lard. Only recently this rigidity was strongly marked in an elderly primipara, where the forceps were required on account of debility on the part of the patient. He was surprised with what facility he succeeded in reducing it so as to enable him to apply the forceps much sooner than he should otherwise have felt justified in doing on account of the danger of severe laceration.

EXPULSION OF THREAD-WORMS.—In treatment of thread-worms in children, Dr. Sidney Martin (*Pract.*, Lond., October,) finds the following most useful:

R. Tincturæ rhei,	. . . . .	ʒiij.
Magnessii carbonatis,	. . . . .	gr. iij.
Tincturæ zingiberis,	. . . . .	ʒj.
Aquam,	. . . . .	ad. ʒj.

Given twice or three times daily, according to the effect on the bowels.

In most cases the ordinary injections of salt and water, infusion of quassia, etc., may be dispensed with: these, the writer thinks, do good for a time, but often fail to relieve the attendant symptoms, which are usually very irregular, and in some cases severe.

THE GALVANIC CAUTERY IN THE TREATMENT OF MEMBRANOUS DYSMENORRHŒA.—At the recent meeting of the Association Française pour l'avancement des sciences (*Ann. de Gynéc.*), M. Landowski expressed the opinion that while membranous dysmenorrhœa generally depended on a particular diathetic state or on general debility, local treatment should not be neglected. He stated that for some time past he had been successful with the galvanic cautery, which,



heated to a dull red, he applied to the endometrium, the cervical canal having previously been dilated. He makes the application five or six days after the cessation of a menstrual flow, and the patient remains in bed for about eight days.

---

## Book Notices.

---

THE SCIENCE AND ART OF OBSTETRICS. By Theophilus Parvin, M.D., LL.D., Professor of Obstetrics and Diseases of Women and Children in Jefferson Medical College, Philadelphia, etc. Illustrated with 214 Wood Cuts and a Colored Plate. Leather, 8vo. Pp. 701. Philadelphia: Lea Brothers & Co. Cincinnati: R. Clarke & Co. Price, \$5.25. 1886.

Professor Theophilus Parvin, the author of the work before us, is well known in Cincinnati and the West, having resided and practiced medicine in Indianapolis for thirty years. He held a chair in the Medical College of Ohio for a number of sessions, and also lectured for several years in one of the medical colleges of Louisville, Ky. In Indianapolis, for five or six years, he conducted a medical journal.

Works upon obstetrics have become very numerous. On account of their number there has not been "a long felt want" in that department of medicine needing to be filled for a long time, yet, every year, more or less new works are added to the already large number. Under the circumstances, we presume, Professor Parvin has as good a right to issue a new work as any of his contemporaries. We, at least, feel disposed to accord him that privilege. His old friends in the West will undoubtedly extend his work a cordial welcome.

The work is divided into five parts. Part I. describes the Anatomy and Physiology of the Female Sexual Organs; Part II. treats of Pregnancy; Part III. is devoted to Labor; Part IV. discusses the Puerperal State; Part V. is taken up with a Description of Obstetric Operations.

Chapter VII. of Part II. is devoted to the Pathology of Pregnancy. This is one of the most, if not the most, interesting chapter of the work. In regard to the subject of the chapter, Professor Parvin says: "The pathology of pregnancy includes first, those diseases which may happen

to the woman in gestation, and which may affect her condition, or be affected by it; in other words, intercurrent maladies and traumatisms; second, the diseases which are exaggerations of physiological conditions belonging to pregnancy, or otherwise dependent upon the pregnant state; third, affections of the sexual organs; fourth, diseases of the ovum."

We are sure this chapter will be studied with much interest by physicians, as the matters of which it treats are of the highest importance. The large experience of Professor Parvin, coupled with his accurate observations, makes him an authority upon all subjects pertaining to the complications of labor. He treats the pathology of pregnancy in a philosophical manner—showing how acute and chronic diseases affect the pregnant condition, and how these are modified by pregnancy.

As our personal experience with anesthetics is unfavorable to the use of them in cases of heart disease, we read with not a little surprise, on page 232, that "disease of the heart does not necessarily contra-indicate anesthesia in labor." The author, however, states that Macdonald claims that chloroform is useful, in that it prevents bearing-down pains. And, again, that Vergely, quoted by Dutertre, says that cardiac diseases do not forbid the use of an anesthetic in labor, and chloroform acts as a sedative to the heart in these affections, and may be given prudently.

(The author has had the experience of an extensive obstetric practice of upward of thirty-four years—nearly two-thirds of which time he has been a medical teacher—and consequently he has embodied in his work a large amount of valuable information derived from personal observation and reflection. The student and physician, therefore, who study this work, can feel that the instruction contained in it comes from the author as his own knowledge, and can be accepted as having been verified by him.)

We can not close our remarks upon the work without speaking in high terms of the high style of art in which the volume has been prepared by the publishers. The paper is of the best quality that is made in these late years, in which paper-making has made great progress, presenting a beautiful, smooth surface. The type is clear and sharp, making the reading a pleasure. The binding is of the best quality of leather, that presents a really beautiful appearance.

A MANUAL OF OBSTETRICS. By A. F. A. King, A.M., M.D., Professor of Obstetrics and Diseases of Women and Children in the Medical Department of the Columbian University, Washington, D. C., and in the University of Vermont, etc. With 102 illustrations. Third Edition. Cloth. 8vo. Pp. 379. Philadelphia: Lea Brothers & Co. Cincinnati: R. Clarke & Co. Price, \$2.25. 1886.

The chief purpose of this work, as stated in the preface, is to present, in an easily intelligible form, such an outline of the rudiments and essentials of Obstetric Science as may constitute a good groundwork for the student at the beginning of his obstetric studies; and one by which it is hoped he will be the better prepared to understand and assimilate the extensive knowledge and classical descriptions contained in larger and more elaborate text-books. It is founded upon the more recent treatises of Leishman, Playfair and Lusk.

(The medical student,) who is in attendance upon medical lectures, will undoubtedly consider the work a great boon. We have never met with a work upon Obstetrics so well suited to the wants of those who are daily receiving instruction by lectures. While the volume is small in size—being scarcely half as large as the ordinary works upon Obstetrics—yet it contains all the essentials pertaining to the Obstetric Art. It can, therefore, be quickly and conveniently consulted. If necessary, it can be carried to the lecture-room for the purpose of reference in order to refresh the mind from time to time.

The work has now reached a third edition, and we would not be surprised if it should pass through many more editions in the future. We can not see what can prevent its becoming very popular.

In preparing a third edition, some portions have been entirely rewritten, and throughout such alterations have been made as were considered requisite to keep it fully abreast with recent advances in Obstetric Science.

---

DISEASES OF THE NERVES, MUSCLES AND SKIN, being Vol. III. of Dr. Hermann Eichhorst's Handbook of Practical Medicine, and Vol. X. of Wood's Library of Standard Medical Authors, 1886 (consisting of 12 volumes, price, \$15.00). Sold only by subscription. William Wood & Co., New York.

We have noticed at considerable length the two previous volumes of this work on the Practice of Medicine; and, consequently, a number of characteristic features of it having been already mentioned, it is not necessary to repeat them. We will state, however, that the first volume was devoted to *Diseases of the Circulatory and Respiratory Apparatus* and the second volume to *Diseases of Digestion, Urinary and Generative Organs*. The volume before us, the third one, as shown by the title, is occupied in the consideration of *Diseases of the Nerves, Muscles and Skin*.

In treating the diseases of the nervous system, the author does not begin with the brain, as is the case in most practices, but starts out with the consideration of the affections of the peripheral nerves. The first nervous disease, therefore, taken up is Facial Paralysis. This he defines as that form of disease whose causes are situated between the peripheral terminations of the nerve and the point at which the trunk of the nerve enters the substance of the central nervous system, at the posterior edge of the peduncle of the pons. The paralysis also presents a peripheral character if the central fibres of the nerve are injured before they enter the nucleus in the floor of the fourth ventricle.

The peripheral course of the nerve may be divided into an intracranial portion, the part contained in the Fallopian canal, and the purely peripheral terminations.

As regards the causes of the affection, the author states that exposure occupies a prominent place. Paralysis sometimes follows the exposure at once, sometimes in a few hours or days. It is often produced by riding in a car near an open window, looking out of a window when the face is warm, standing at a windy corner of a street, etc., and especially on that side which is exposed to the wind or cold air. Sleeping near a cold, damp wall is also sufficient to produce the paralysis. In other cases traumatism is the cause.

Peripheral paralysis of the nerves of the lower limbs, the author states, is rare; paralysis in this locality is usually spinal or cerebral in its origin.

The discussion of the diseases of the spinal cord, the reader will find quite interesting, especially that of sclerosis of the posterior columns—progressive locomotor ataxia. The “Brach-Romberg Symptom” he regards as attributable to changes in the muscular sense, which the reader will recollect as constituting the sixth “sense.” This is shown,



he says, by the tottering movements of the patient in the dark, or when the eyes are closed. It is evident that in the light the eye is able, to a certain extent, to overcome the defect in the muscular sense. The tottering is especially marked when the feet are brought close together.

It has been the aim of the author to make the work a very practical one on the Practice of Medicine; and our examination leads us to believe that he has been successful in accomplishing his purpose. There is no unnecessary verbiage in describing the various affections—the language being plain and to the point, recording all well-established principles and facts, and no space occupied with long-spun-out theories which are not edifying.

The work by being divided into three volumes is made highly convenient for the use of students. Each volume containing about 350 pages, in which is embraced the complete discussion of two or more classes of disease, peculiarly fits it for easy reference and for use as a text-book. The division into comparatively small volumes permits it to be portable, so that it can easily be carried to the lecture-room.

---

## Editorial.

---

NEWSPAPER INTERVIEWS.—We do not wish to be querulous, but we think that it is time a protest should be made against the numerous interviews by reporters of physicians that have been published of late in the daily newspapers. We do not think that it is improper for the public to be enlightened upon sanitary subjects, prominent causes of epidemic diseases, specific morbid agencies, etc., by the publication of occasional conversations between an intelligent newspaper man and a number of medical men; for by enlightening the community in reference to some of the causes of disease and the means of avoiding them, the public health may be subserved. But when published interviews with physicians are appearing every few weeks, and there is existing no particular reason for them, we feel it incumbent to protest, and to remind some of our brethren that by permitting themselves to appear thus frequently as public instructors they expose themselves to the charge of quackery.

If Asiatic Cholera or Yellow Fever or some other very fatal epidemic disease were threatening our Queen City, we

would regard it as very proper that the citizens should be instructed through the newspapers by competent regular medical gentlemen as to the nature of the disease, the accepted views of the profession as to some of the prominent causes of it, and the most effective means of escaping them; but so long as there are no diseases of the kind to be apprehended, we can discover no cause for newspaper publications of long interviews in regard to them.

In the last four or five months there has appeared in various newspapers of Cincinnati—at one time in one, at another time in another—lengthy and elaborate discussions by prominent physicians of diphtheria, scarlet fever, small-pox, etc., in the form of interviews by a reporter. These diseases, as is well known, are frequently prevalent either epidemically or endemically, and their nature and causes are as familiar, and have been for a long time, with the intelligent portion of the public as is possible. But newspaper men seem sometimes to be afflicted with a dearth of news, and, at such times, a reporter is started out to visit the offices of a number of physicians and interview them in regard to some of these affections with which the community, with the exceptions of the treatment of them, know nearly as much about as the doctors themselves. Our medical men, however busy they may be, always appear to have time to be interviewed; and the result is, the next day, after the holding of these interviews, there appears in the enterprising newspaper two or three columns filled with what Drs. A, B, and C have had to say on some one or the other of the threadworn maladies. Not unfrequently some of these published interviews bear evidence that the physicians have been notified some hours previously of the reporter's visit, and have posted themselves, so that when the reporter arrived and had sharpened his pencil and gotten ready his note book, they were ready to discourse upon the disease, concerning which information was sought, in a most elaborate and methodical manner, giving an account of the history and describing the etiology, pathology, signs, symptoms, diagnosis and prognosis, as minutely and fully as any of the text-books. Again, there is reason to believe that, instead of any actual interview having taken place, as represented, the reporter has been furnished with a paper prepared by the physician, the latter having had the opportunity given him to consult his books and write out in full a description of the disease.

The Hunters and other irregular consumption doctors, in times past, used to occupy large space in the newspapers with dissertations upon lung diseases, but they paid the printer a large fee for every square inch of room they occupied. Their discourses being compilations taken from medical works, contained often very valuable information, but, nevertheless, their publications were regarded as evidence of their quackery; for it was held that laymen should apply to their physicians for information and advice, and that newspaper articles on medical subjects tended to encourage delay in seeking proper treatment, to the detriment of those needing it. But many regular physicians seem to grasp eagerly at any opportunity offered them to discourse at length, without charge, upon consumption or any other disease in a daily paper whenever solicited to do so by a newspaper man. Is it any the less quackery to thus publish essays and advertise one's self because there is nothing to pay for it? We think not. It is more manly, in our opinion, to pay for advertising.

But some will probably say that this is not advertising—it is instructing the public. In reply, we will state that the public have not needed the information contained in recent interviews of medical men by reporters. There is not an intelligent layman that was not fully aware of all the facts contained in any of them. And, besides, it is set forth in the Code of Ethics that it is unprofessional and injurious to the public welfare to treat of medical subjects in public prints. A little knowledge is worse than none at all. Consequently laymen, not having the opportunity to become familiar with the principles of medicine as a science, can not understand fully disconnected facts.

---

A JUDICIAL WRONG.—Many of our readers have undoubtedly noticed in the newspapers the report of a trial in progress at the time of our writing in the Common Pleas Court, of Lebanon, Ohio, during the course of which Dr. F. H. Darby was sent to jail for refusing to give expert answers to questions unless guaranteed an expert's fee. The judge, who thus held him in contempt of court because he would not, at his command, without proper compensation, deliver up his knowledge which had caused him the expenditure of much time, labor and money, and was, therefore, equivalent to valuable property, should be regarded as having been guilty of great oppression in office. The med-

ical profession of the country should voice their feelings of outrage of such an act in a way as to impress such a *minister of justice* that he had inflicted a great wrong. If a physician can be ordered to surrender scientific knowledge that can be acquired only by the "sweat of the face;" by the taxing of his brain and nervous force; by the expense of time and money, and by means of which, after he has made it his own, he obtains for himself and his family an honorable living, he can be compelled just as righteously, by the order of a court, to give up any real property; for with a medical man knowledge and skill are as much property for financial advantages, as the merchant's merchandise, which he employs for the same purpose, is property.

No one believes that this Lebanon judge would command an attorney, upon the witness stand, to deliver up his legal lore without compensation, for the benefit of a party engaged in a lawsuit, or, in case of refusal, be imprisoned in a common jail along with thieves, housebreakers, highwaymen, forgers, murderers, and such-like gentry. The *minister of justice*, himself, knows that he would not thus outrage one of his own profession. Then, how can he reconcile the infliction of this act of oppression upon a medical man with his conscience? The scientific qualifications of a physician are of a higher order, requiring more natural talent, more time and more labor than are the qualifications necessary for the practice of law; and yet this limb of the law, who has been made a judge, and is no doubt inflated with his dignity of dispenser of justice, has proposed to treat the professional knowledge of a physician as of no value—to place it on a par with the ordinary knowledge of men gained by chance observation.

But we propose to recur to this subject at another time. As the facts of this case have just only now been brought to our attention, what we write at the present time is after the last form of the NEWS had been put in type, and other matter has been omitted for this writing. A friend at Lebanon informs us that Dr. Darby's case will be carried to the Supreme Court in order to ascertain whether or not a physician has any rights as a professional man; whether or not any judge or squire or constable can order him at his pleasure, without compensation, to use his scientific acquirements for the benefit of any one who wishes to employ them. The case of Dr. Darby is the case of the whole profession. Every physician has as great an interest as he has in humil-



iating the arrogance of those who would treat the medical profession with contempt. We do not know whether the Doctor needs financial aid in this fight for principle. If he does, it should be afforded him as well as extending him moral support.

---

WESLEY AS A PHYSICIAN.—It seem that the Rev. John Wesley took an interest in medicine and wrote a work upon it. The editor of the New York *Medical Record* has come into possession of a book entitled, "Primitive Physic; or, an Early and Natural Method of Curing all Diseases." By John Wesley, M.A. The work contains so many absurdities as regards medical theories, and so many prescriptions repulsive to common-sense, that, if its authenticity were not vouched for by one holding so high a position as Dr. Schrady, the editor of the *Record*, we would be disposed to doubt of its having emanated from a man having the ability, learning and culture possessed by John Wesley, the founder of Methodism. His brother, who was connected with him in his religious work, wrote some of the sweetest and most beautiful hymns that ever emanated from the human brain.

We are told in the *Record* that Wesley, in his book, takes a theological view of disease, and says that man, when he first came out of the hands of the Creator, was immortal and incorruptible in body as well as soul; there were no seeds of dissolution or disease in him. With the advent of sin came weakness, pain, sickness and death. The great antidote to many diseases is contained in the curse: "In the sweat of thy face shalt thou eat bread;" for the power of exercise, both to preserve and restore health, is greater than can be conceived, especially in those who add temperance thereto. Primitive physic, however, Wesley declares, was not divined, nor scientific or philosophical, but was, and always should be, accidental or experimental.

Wesley seems to have held the opinion that physicians were a set of scoundrels; for he says, "Is it not needful in the highest degree to rescue men from wasting their fortunes, from pining away in sickness and pain through the selfishness and dishonesty of physicians; yea, and many times throwing away their lives after their health, time and substance." He writes his book "because doctors' books are too dear for poor men to buy, and too hard for plain men to understand; they do not contain only safe, cheap and easy medicines, but many that are dear, far-fetched and

consisting of too many ingredients. Their method of compounding and decompounding medicines can never be reconciled to common sense. Experience shows that one medicine will cure most disorders, at least as well as twenty put together. Why, then, do the doctors add the other nineteen? Only to swell the apothecary's bill and to divide the spoil."

Notwithstanding Wesley's low estimate of the morals of physicians, he recommends calling one in under certain conditions, viz. : if all the remedies fail which he (Wesley) has prescribed, then call in "a physician who fears God," not before. He does not describe, so far as we can learn from the *Record*, how it is to be ascertained whether a particular doctor "fears God" or not. As they are all a selfish set of rascals, according to Wesley, who have an eye only to their interests, the assertion of any one of them can not be taken that he fears God, for one belonging to such a class of dishonest men would not hesitate to lie if it was to his interest.

He states that because they are not safe, but exceedingly dangerous, he has discarded antimony and those four herculean medicines—opium, bark, steel and quicksilver—from the remedies he has advised to be employed; but, on look-through his prescriptions for various diseases, there will be found these drugs recommended frequently and in large doses. Thus, for *ague* he directs "10 to 20 drops of laudanum to be given in two drachms of syrup of poppies." "*In a fit of apoplexy*" put a handful of salt in a pint of water, and, if possible, pour it down the throat of the patient. He will quickly come to himself. If he does not, send for a good physician who fears God. In the meantime let two strong men carry him upright about the room, or give a vomit of three grains of tartar emetic, and blow white hellebore up the nose."

"A cancer of thirteen years' standing was cured by applying poppy water, plantain and rose water mixed with honey of roses; but Mrs. Bates, of Lancashire, was cured of a cancer of the breast, a consumption, a sciatica and a rheumatism, which she had had for nearly twenty years, by bathing daily for a month and drinking only cold water. If this fails apply *goose-dung* and celadine; they will both *cleanse* and heal the sore; or, rub the whole breast, night and morning, with hartshorn and oil."

"For a cancer of the mouth and throat, blow in the ashes of scarlet cloth; it seldom fails." It is a pity that Dr. Schrady

had not come across this prescription while attending General Grant.

"*For colic in children*, put one grain of tartar emetic in six tablespoonfuls. One teaspoonful will puke a child one week old, and a large teaspoonful is sufficient for a child one month old. Repeat this puke every day. This is, perhaps, the best medicine yet discovered for infants. It speedily cures inward fits, gripes, looseness of the bowels, thrush, and convulsions in children."

The editor of the *Record*, in quoting this last paragraph, places exclamation points in brackets at the end of each sentence. The result of prescribing tartar emetic in this reckless, ignorant manner to an infant, from a week to a month old, would be certain death to it, as every physician knows. In fact, physicians never prescribe tartar emetic to infants of any age. This paragraph, of itself, proves that persons had better send for a physician "who fears God" at the beginning of a sickness, and not wait until after they have first tried all the medicines recommended by Wesley; for there would be a great probability, if they should wait until they had gone through his *materia medica*, that a physician "who fears God" would not be able to make use of his scientific theories.

"*For deafness* put a little salt in the ear."

"*For a bloodshot eye*, blow in fine white sugar-candy; for dull sight, drop in the juice of rotten apples, often. For *films* of the eye, blow in *stercus humanum* finely powdered; it is well to call it *zibethum occidentale*. For white specks on the eye put in a little ear-wax every night."

"*For falling of the fundament*, apply a cloth covered thick with brick-dust." Dr. Schrady suggests that they are both *red*.

"*For a fever with delirium*, apply a treacle plaster on the top of the head."

The *Medical Record* publishes many other prescriptions from this medical work of the Rev. John Wesley, but we have not space for any more than we have quoted. We will state that, during Mr. Wesley's time, the most absurd remedies, for various affections, were believed in by intelligent persons outside of the medical profession. Even at this time it is not unusual to find people making use of means to cure this or that ailment of whom, considering the general intelligence, we would have expected better.

The first edition of Wesley's medical work was issued in

1747. There were twenty-two editions published. The last one was issued in 1788.

**SUNDAY OBSERVANCE IN BOSTON.**—Notwithstanding that there is a legal enactment in Ohio forbidding the transaction of ordinary business on Sunday, or the first day of the week, yet in Cincinnati not only the drug-stores, but all the saloons, theaters, many of the groceries and other stores are open on that day, the same as on other days of the week, from early morning until midnight, for carrying on their traffic. In summer-time on Sundays the beer gardens and hilltops are crowded with the worshipers of Gambrinus, who spend the day in beer drinking and reveling. A suggestion to close these places and compel an observance of the day would be regarded as absurd—there would be a better prospect of success if an attempt were made to turn the current of the Ohio River up stream. Although the officers of the law are sworn to enforce all laws, yet it seems to be generally conceded that the Sunday laws form an exception; and, that, although they continue among the statutes, they are to be treated as dead letters.

The non-enforcement of Sunday laws, we are pleased to know, does not exist in all the large cities of this country. Although New York is a larger city than Cincinnati and is considered a very wicked city, yet there is in it a much better observance of the legal enactments forbidding the performance of common labor on the first day of the week than there is in the latter. In Boston, we learn, there is still greater respect for law. Though it may be derisively spoken of as puritanical, claiming superior culture for its people, etc., it seems to possess the virtue of respect for law, which ought to secure for it the esteem of all good people. We are informed by a recent exchange that action has lately been taken to compel the closing of all the drug-stores on Sunday. A pharmacist may keep a man in his store on that day for the purpose of compounding prescriptions in good faith for the sick, but the doors must not only be kept closed, but must also be kept locked, opening one of them only when a customer calls with a physician's prescription.

The closing of the drug-stores on Sunday, in Boston, came about, it is said, in a singular manner from the grievances of another class of Sunday workers, the barbers. It seems that some of the journeymen barbers desired to



secure a respite from their usual duties on that day, but a few of the leading tonsorial proprietors were not so inclined. Recourse was finally had to one of the laws of the city, and a recent decision of the Supreme Court held that all business traffic on that day was illegal and could be prohibited by an enforcement of the law. Thereupon the following letter was addressed to the President of the Boston Druggists' Association:

"BOSTON, November 17, 1886.

"J. A. GILMAN, Esq.,

"*Dear Sir:*—The Board of Police requests me to say that it would be pleased to confer with you and your associate officers of the Druggists' Association, to-morrow, at twelve o'clock, noon, in regard to the recent decision of the Supreme Court, relative to closing places of business on the Lord's Day.

Very respectfully,

"F. C. IRVING, *Clerk.*"

Is there a resident of Cincinnati who supposes that the Police Commissioners of Cincinnati are capable of ordering such a manly letter as the one above sent to a Druggists' Association of their city? We think not. A proposition made to them looking to the suppression of any kind of labor on the "Lord's Day" would excite their most sovereign contempt.

Agreeably with the notice, officers of the Association called at the office of the Board of Police, and were advised that the recent decision of the Supreme Court on the Sunday law would render an apothecary, keeping his store open on Sunday, liable to prosecution.

"They were informed that an apothecary may be in his store to put up prescriptions or sell medicines only when called for, but must keep the store door locked, opening it only when customers called."

"The superintendent of police was notified of the decision and instructed to enforce the law."

The correspondence was at once printed and sent to all apothecaries in Boston and vicinity.

Among the druggists there were some amusing placards placed in their windows and on their doors. Some windows were placed in mourning, but the law, it is stated, has been quite generally heeded.

The *Pharmaceutical Record* states that the police authorities of that city have advised the public that the sale of all

merchandise will be prohibited on Sunday, except food, before 10 A.M., and tobacco, cigars and medicines.

Druggists in Cincinnati not only sell medicines on the "Lord's Day," but also sell soda water, cigars, tobacco, combs, brushes, perfumery, and notions of every kind—in fact, everything that they keep for sale, they sell on that day. This selling of general merchandise by druggists on Sunday is not confined to "those of the world," but is participated in by the professedly pious church-members. How the latter compromise with their consciences for such flagrant Sabbath-breaking we do not know. But they seem to do so in some way. We feel sure that there is a time coming when some of these will be called upon "to rise and explain." Keeping a drug-store does not confer upon a person a right to sell tobacco on Sunday, when for a tobaccoist to do so would be a sin.

---

NEW FORMS OF MEDICATION.—Messrs. Frederick Stearns & Co., of Detroit, advertise new forms of medication in which the potent isolated principles—alkaloids, etc.—of drugs may be prescribed or administered with perfect precision. They are in the form of granules and pellets, each one of them containing, with great exactness, a certain definite quantity of an alkaloid or active principle of a medicine. Of course, an active principle contains no waste material, and the medication by it has the bulk of the medicine reduced to a minimum. We really can not appreciate, at this time, the value of the discovery when the pharmaceutical chemist succeeded in finding in cinchona bark the alkaloid quinia, and reduced the dose of that most valuable and really only reliable antiperiodic from two or three ounces to a few grains. Before the discovery of quinia, we have been told it was the custom, in order to break up an intermittent, to administer Peruvian bark in doses of a heaping tablespoonful every two or three hours, mixed up in some sort of syrup. People nowadays would rather die of a disease than submit to such treatment. But very many would have no choice—their stomachs revolting and preventing though the will assented.

We would suppose that this new form of medication would prove very convenient to such physicians as dispense their own prescriptions. The very small size of the granules or pellets would permit the carrying almost of the whole materia medica in a pocket-case. And, then, there is the

advantage that each pellet contains an exact amount by weight of an alkaloid. The Messrs. Frederick Stearns & Co. will send to any physician writing for it, a pamphlet of thirty pages containing a full description of this new medication termed "Positive Medication," in consequence of the potent principles being so put up as to be administered with perfect precision. Write, mentioning the NEWS.

---

WOOD ENGRAVING.—We are not unfrequently applied to by physicians, who are desirous to have articles which they have written illustrated by cuts, to recommend them to an engraver on wood for the purpose. For the information of those who may hereafter desire the services of such an artist, it affords us pleasure to be able to speak in high terms of Mr. Edward McFee, of 56 West Fourth Street, Cincinnati. Mr. McFee is a young gentleman who understands his business thoroughly, and guarantees to render satisfaction. We have seen many of his engravings and can bear testimony of their having been executed in the most artistic manner. He made the illustrations to be found upon pages 724, 725, 727, 728, 729 and 734 of the November issue of the MEDICAL NEWS. We have also had brought to our attention cuts by him copied from the best English publications on surgery, illustrating very complicated pathological specimens. They were fully equal to the originals.

Portrait engraving is made a specialty by Mr. McFee—many of his portraits appear in the *Graphic*, *Illustrated News* and other illustrated papers.

---

DEATH OF DR. C. C. FIELD.—This well-known and highly esteemed physician died at his home, in Easton, Pa., Friday morning, December 3, 1886. The immediate cause of his death was neuralgia of the heart. The doctor was about on Thursday attending to his patients, and the only complaint made by him was of indigestion. He rested well during the night and until 7 A. M., when he called his son, Dr. Rush Field, and complained of nausea. Up to that time he was in as good condition as usual, and drank, as was his usual custom, a cup of coffee before rising. The vomiting agitated the heart and neuralgia set in. Drs. Rush and Wood Field, his sons, then applied the proper remedies, and although they produced the desired effect on former occasions, they failed at this time. During a severe pain the doctor remarked, "This pain is killing me." By request

he was raised in the bed. His eyes were now set and in a short time his spirit had fled. His death was so sudden that time was not had to summon the other members of the family, and none but the children named were present when he expired.

Dr. Field was born on February 18, 1817, on board the ship *Ann* within the bounds of Queen's County, New York. Captain Crocker, who had charge of the vessel, wrapped the infant in an American flag, and the child was subsequently named Cridland Crocker Field, the former name being taken from his mother's side, the latter being that of the Captain.

After completing a Classical Course, he began the study of medicine as a private pupil of William E. Horner, M.D., late eminent professor of anatomy in the University of Pennsylvania, from which institution he graduated with honor in 1837. His father as well as his grandfather were both physicians and surgeons.

In 1838 Dr. Field came to Northampton County, and in the same year was married. He shortly afterward settled in Easton, where, for the past fifty years, he has attended to an extensive practice, medical and surgical. Many of the most difficult and delicate operations in surgery were successfully performed by him, and made his name widely known in this and adjoining States. Physicians and surgeons from various points frequently called him in consultation. The operations that have made him famous are the removal of a cervical tumor, with ligation and excision of a considerable part of the jugular vein; excision of the entire femur, an operation unique in the annals of surgery; excision of the entire radius, extirpation of the parotid gland, which difficult operation he has performed several times. These operations placed him in the front rank of modern surgeons. His favorite region for operating was the neck, from which he has, time and again, removed tumors which had entirely encompassed the carotid artery.

As a teacher Dr. Field has not been surpassed, he having sent more students to his favorite institution, the University of Pennsylvania, than almost any other physician.

---

THE LATE JAMES G. WAKLEY, M.D.—IN MEMORIAM.—  
In a recent issue we mentioned the decease of Dr. Wakley, who, for twenty-five years, had been connected with the *Lancet*, of London, England, as editor; and we also, at the time, gave a brief account of his funeral, which was marked



by the attendance of many poor people, by whom he was evidently much beloved for his numerous works of charity among them.

In the issue of the *Lancet*, of September 18th, Dr. J. P. Steele contributes a few verses of Latin poetry as a tribute to the work and character of Dr. Wakley. Believing that they will be interesting to some of our readers, we copy them. They are entitled

IN MEMORIAM—J. G. W.

“Non secus ac flerunt Palinurum Troes ademptum  
Per freta nocturnam nave tenente viam,  
Deflendus nobis raptus de puppe magister  
Pervigil adversas tot superare vices:

“Digne, mari rerum, qui molireris habenas  
A patre donatas deficiente manu,  
Direxti cursum, medica ducente Minerva,  
Quo genus humanum cunque petebat opem.

“Ergo perpetuus carum sopor urget amicum  
Quem Pudor et lugent cum Probitate Fides?  
Cui fuit in terris curae praestare salutem  
Illum habet in caelis non peritura Salus.”

“J. P. STEELE, M.D.”

It will afford us a great deal of pleasure, indeed, if some one of our subscribers, having skill in writing poetry, will send us a translation of these verses in good English poetry. We do not wish a translation in prose, for we can easily make such a translation ourselves.

DR. LIVEZEY writes: “While wintering in Florida I met with my annual patient, a young lady of twenty-eight, from Chicago, who was sent hither three or four years ago in order to pass out into the “spirit land” comfortably, who now being troubled with poor appetite, a slight but distressing nausea, great debility, irregular menstruation, excessive cardiac action on the least exertion, etc., I ordered one ounce bottle of Lactopeptine of the New York Pharmacal Association’s manufacture and she improved at once. Soon after she met a lady friend who told her she ought to take Lactopeptine, stating what wonders it had done her, who was troubled “just the same way” (of course). “Why, bless me,” said my patient, “that is just what my doctor prescribed for me and I am doing nicely.” By the time she finished the small vial she declared she never felt better in her life, her appetite being regular and everything O. K.

N. B.—She has taken since Lactopeptine, Elixir, Calisaya, Iron and Bismuth, with excellent results.—*The Medical Summary*.













